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**Table 1. Total enrollment in all institutions of higher education, by level of enrollment and broad field: 1975-95**

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| Year                         | Total      | Under-graduate enrollment | Graduate enrollment |          |             |               |                  | First professional enrollment |
|------------------------------|------------|---------------------------|---------------------|----------|-------------|---------------|------------------|-------------------------------|
|                              |            |                           | Total, all fields   | Sciences | Engineering | Health fields | All other fields |                               |
| Total, all U.S. institutions |            |                           |                     |          |             |               |                  |                               |
| 1975 .....                   | 11,290,719 | 8,727,826                 | 1,267,537           | 234,919  | 68,271      | 25,519        | 938,828          | 243,958                       |
| 1976 .....                   | 11,121,426 | 9,532,914                 | 1,338,586           | 238,877  | 66,657      | 28,290        | 1,004,762        | 245,913                       |
| 1977 .....                   | 11,415,020 | 9,898,039                 | 1,264,082           | 243,131  | 68,685      | 33,675        | 918,591          | 252,899                       |
| 1978 <sup>1</sup> .....      | 11,391,950 | 9,867,493                 | 1,265,961           | 236,653  | 67,697      | 35,611        | 926,000          | 258,496                       |
| 1979 .....                   | 11,707,126 | 10,127,241                | 1,314,892           | 247,443  | 71,728      | 38,517        | 957,204          | 264,993                       |
| 1980 .....                   | 12,234,644 | 9,821,513                 | 1,351,268           | 251,384  | 74,312      | 41,462        | 984,110          | 279,797                       |
| 1981 .....                   | 12,517,753 | 10,083,904                | 1,349,575           | 252,531  | 79,555      | 43,117        | 974,372          | 276,518                       |
| 1982 .....                   | 12,588,520 | 10,205,475                | 1,329,644           | 255,266  | 83,687      | 43,418        | 947,273          | 280,469                       |
| 1983 .....                   | 12,633,930 | 10,292,495                | 1,347,973           | 255,946  | 91,119      | 43,457        | 957,451          | 280,696                       |
| 1984 <sup>1</sup> .....      | 12,400,392 | 10,081,336                | 1,353,554           | 257,034  | 92,712      | 44,972        | 958,836          | 280,820                       |
| 1985 <sup>1</sup> .....      | 12,411,945 | 9,968,345                 | 1,384,862           | 262,135  | 95,991      | 45,962        | 980,774          | 277,331                       |
| 1986 <sup>1</sup> .....      | 12,670,109 | 10,952,167                | 1,444,369           | 266,245  | 101,874     | 47,438        | 1,028,812        | 273,573                       |
| 1987 <sup>1</sup> .....      | 12,923,451 | 11,191,431                | 1,461,376           | 269,402  | 103,953     | 48,171        | 1,039,850        | 270,644                       |
| 1988 .....                   | 13,218,786 | 11,467,209                | 1,481,509           | 272,458  | 102,829     | 49,384        | 1,056,838        | 270,068                       |
| 1989 .....                   | 13,701,518 | 11,893,125                | 1,531,046           | 278,726  | 104,043     | 51,868        | 1,096,409        | 277,347                       |
| 1990 .....                   | 13,983,255 | 12,110,847                | 1,596,037           | 289,534  | 107,625     | 55,091        | 1,143,787        | 276,371                       |
| 1991 .....                   | 14,527,724 | 12,595,335                | 1,648,952           | 299,132  | 113,576     | 58,606        | 1,177,638        | 283,437                       |
| 1992 .....                   | 14,657,118 | 12,693,778                | 1,679,644           | 312,762  | 118,035     | 63,029        | 1,185,818        | 283,696                       |
| 1993 .....                   | 14,477,792 | 12,482,813                | 1,699,292           | 319,352  | 116,881     | 68,605        | 1,194,454        | 295,687                       |
| 1994 .....                   | 14,449,476 | 12,417,701                | 1,734,371           | 318,698  | 113,060     | 73,501        | 1,229,112        | 297,404                       |
| 1995 .....                   | NA         | NA                        | NA                  | 316,393  | 107,529     | 77,588        | NA               | NA                            |
| Subtotal, 50 States and D.C. |            |                           |                     |          |             |               |                  |                               |
| 1975 .....                   | 11,182,557 | 8,630,996                 | 1,263,033           | 234,044  | 68,217      | 25,173        | 935,599          | 241,624                       |
| 1976 .....                   | 11,011,760 | 9,430,288                 | 1,333,254           | 237,948  | 66,615      | 27,998        | 1,000,693        | 244,205                       |
| 1977 .....                   | 11,285,787 | 9,776,273                 | 1,258,157           | 242,049  | 68,567      | 33,358        | 914,183          | 251,357                       |
| 1978 <sup>1</sup> .....      | 11,260,092 | 9,742,190                 | 1,260,998           | 235,547  | 67,628      | 35,303        | 922,520          | 256,904                       |
| 1979 .....                   | 11,569,649 | 9,997,777                 | 1,308,518           | 246,317  | 71,678      | 38,249        | 952,274          | 263,354                       |
| 1980 .....                   | 12,096,667 | 9,693,203                 | 1,344,073           | 249,886  | 74,264      | 41,126        | 978,797          | 277,715                       |
| 1981 .....                   | 12,371,440 | 9,947,524                 | 1,342,555           | 251,017  | 79,500      | 42,819        | 969,219          | 274,543                       |
| 1982 .....                   | 12,409,700 | 10,046,267                | 1,315,429           | 253,677  | 83,626      | 43,033        | 935,093          | 276,006                       |
| 1983 .....                   | 12,464,455 | 10,134,554                | 1,340,133           | 254,239  | 91,057      | 42,931        | 951,906          | 278,472                       |
| 1984 <sup>1</sup> .....      | 12,241,755 | 9,935,832                 | 1,345,271           | 255,178  | 92,627      | 44,477        | 952,989          | 278,547                       |
| 1985 <sup>1</sup> .....      | 12,246,885 | 9,816,650                 | 1,376,176           | 260,237  | 95,889      | 45,410        | 974,640          | 274,148                       |
| 1986 <sup>1</sup> .....      | 12,504,489 | 10,798,800                | 1,435,288           | 264,353  | 101,764     | 46,920        | 1,022,251        | 270,401                       |
| 1987 <sup>1</sup> .....      | 12,766,642 | 11,046,235                | 1,452,075           | 267,798  | 103,836     | 47,594        | 1,032,847        | 268,332                       |
| 1988 .....                   | 13,055,337 | 11,316,548                | 1,471,680           | 270,959  | 102,708     | 48,807        | 1,049,206        | 267,109                       |
| 1989 .....                   | 13,538,563 | 11,742,531                | 1,521,581           | 277,146  | 103,935     | 51,278        | 1,089,222        | 274,451                       |
| 1990 .....                   | 13,818,637 | 11,959,106                | 1,586,165           | 287,864  | 107,516     | 54,495        | 1,136,290        | 273,366                       |
| 1991 .....                   | 14,358,953 | 12,439,287                | 1,639,135           | 297,327  | 113,408     | 57,977        | 1,170,423        | 280,531                       |
| 1992 .....                   | 14,487,359 | 12,537,700                | 1,668,737           | 310,948  | 117,825     | 62,293        | 1,177,671        | 280,922                       |
| 1993 .....                   | 14,304,803 | 12,323,959                | 1,688,413           | 317,492  | 116,668     | 67,866        | 1,186,387        | 292,431                       |
| 1994 .....                   | 14,278,790 | 12,262,608                | 1,721,469           | 316,814  | 112,863     | 72,727        | 1,219,065        | 294,713                       |
| 1995 .....                   | NA         | NA                        | NA                  | 314,369  | 107,312     | 76,694        | NA               | NA                            |
| Outlying areas               |            |                           |                     |          |             |               |                  |                               |
| 1975 .....                   | 108,162    | 96,830                    | 4,504               | 875      | 54          | 346           | 3,229            | 2,334                         |
| 1976 .....                   | 109,666    | 102,626                   | 5,332               | 929      | 42          | 292           | 4,069            | 1,708                         |
| 1977 .....                   | 129,233    | 121,766                   | 5,925               | 1,082    | 118         | 317           | 4,408            | 1,542                         |
| 1978 <sup>1</sup> .....      | 131,858    | 125,303                   | 4,963               | 1,106    | 69          | 308           | 3,480            | 1,592                         |
| 1979 .....                   | 137,477    | 129,464                   | 6,374               | 1,126    | 50          | 268           | 4,930            | 1,639                         |
| 1980 .....                   | 137,977    | 128,310                   | 7,195               | 1,498    | 48          | 336           | 5,313            | 2,082                         |
| 1981 .....                   | 146,313    | 136,380                   | 7,020               | 1,514    | 55          | 298           | 5,153            | 1,975                         |
| 1982 .....                   | 178,820    | 159,208                   | 14,215              | 1,589    | 61          | 385           | 12,180           | 4,463                         |
| 1983 .....                   | 169,475    | 157,941                   | 7,840               | 1,707    | 62          | 526           | 5,545            | 2,224                         |
| 1984 <sup>1</sup> .....      | 158,637    | 145,504                   | 8,283               | 1,856    | 85          | 495           | 5,847            | 2,273                         |
| 1985 <sup>1</sup> .....      | 165,060    | 151,695                   | 8,686               | 1,898    | 102         | 552           | 6,134            | 3,183                         |
| 1986 <sup>1</sup> .....      | 165,620    | 153,367                   | 9,081               | 1,892    | 110         | 518           | 6,561            | 3,172                         |
| 1987 <sup>1</sup> .....      | 156,809    | 145,196                   | 9,301               | 1,604    | 117         | 577           | 7,003            | 2,312                         |
| 1988 .....                   | 163,449    | 150,661                   | 9,829               | 1,499    | 121         | 577           | 7,632            | 2,959                         |
| 1989 .....                   | 162,955    | 150,594                   | 9,465               | 1,580    | 108         | 590           | 7,187            | 2,896                         |
| 1990 .....                   | 164,618    | 151,741                   | 9,872               | 1,670    | 109         | 596           | 7,497            | 3,005                         |
| 1991 .....                   | 168,771    | 156,048                   | 9,817               | 1,805    | 168         | 629           | 7,215            | 2,906                         |
| 1992 .....                   | 169,759    | 156,078                   | 10,907              | 1,814    | 210         | 736           | 8,147            | 2,774                         |
| 1993 .....                   | 172,989    | 158,854                   | 10,879              | 1,860    | 213         | 739           | 8,067            | 3,256                         |
| 1994 .....                   | 170,686    | 155,093                   | 12,902              | 1,884    | 197         | 774           | 10,047           | 2,691                         |
| 1995 .....                   | NA         | NA                        | NA                  | 2,024    | 217         | 894           | NA               | NA                            |

<sup>1</sup> NSF figures for 1978 and 1984 through 1987 include estimates for master's-granting institutions.

**KEY:** NA = Not available

**SOURCES:** U.S. Department of Education/NCES, Survey of Opening Fall Enrollment, and National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

**Table 2. Graduate students in science, engineering, and health fields in all institutions,  
by field: 1975-95**

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| Year                    | Total,<br>science<br>and engi-<br>neering | Sciences                     |                           |  |                                |                                |   |                           |                  |                    |
|-------------------------|---|------------------------------|---------------------------|--|--------------------------------|--------------------------------|---|---------------------------|------------------|--------------------|
|                         |   | Sciences,<br>total           | Physical<br>sciences      | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Mathe-<br>matical<br>sciences  | Computer<br>sciences           | Agri-<br>cultural<br>sciences                         | Biological<br>sciences    | Psychology       | Social<br>sciences |
| 1975 .....              | 303,190                                   | 234,919                      | 26,310                    | 12,079   | 16,892                         | 8,415                          | 10,702  | 46,398                    | 36,191           | 77,932             |
| 1976 .....              | 305,534                                   | 238,877                      | 26,631                    | 12,819   | 17,071                         | 8,627                          | 11,285  | 47,728                    | 37,458           | 77,258             |
| 1977 .....              | 311,816                                   | 243,131                      | 26,855                    | 13,455   | 16,052                         | 9,108                          | 11,677  | 49,234                    | 38,617           | 78,133             |
| 1978 <sup>1</sup> ..... | 304,350                                   | 236,653                      | 26,274                    | 13,276   | 14,812                         | 9,847                          | 11,869  | 47,923                    | 37,522           | 75,130             |
| 1979 .....              | 319,171                                   | 247,443                      | 26,695                    | 13,737   | 15,031                         | 11,690                         | 12,240  | 48,199                    | 39,766           | 80,085             |
| 1980 .....              | 325,696                                   | 251,384                      | 26,934                    | 14,051   | 15,311                         | 13,578                         | 12,452  | 47,596                    | 40,610           | 80,852             |
| 1981 .....              | 332,086                                   | 252,531                      | 27,357                    | 14,266   | 15,881                         | 16,437                         | 12,355  | 46,639                    | 40,666           | 78,930             |
| 1982 .....              | 338,953                                   | 255,266                      | 28,186                    | 15,020   | 17,157                         | 19,812                         | 12,583  | 45,970                    | 40,073           | 76,465             |
| 1983 .....              | 347,065                                   | 255,946                      | 29,453                    | 15,453   | 17,358                         | 23,333                         | 12,429  | 45,644                    | 40,905           | 71,371             |
| 1984 <sup>2</sup> ..... | 349,746                                   | 257,034                      | 30,056                    | 15,505   | 17,443                         | 25,526                         | 12,226  | 45,763                    | 40,931           | 69,584             |
| 1985 <sup>2</sup> ..... | 358,126                                   | 262,135                      | 30,981                    | 15,420   | 17,563                         | 29,769                         | 11,561  | 46,112                    | 40,721           | 70,008             |
| 1986 <sup>2</sup> ..... | 368,119                                   | 266,245                      | 32,246                    | 15,066   | 17,949                         | 31,349                         | 11,458  | 46,765                    | 41,241           | 70,171             |
| 1987 <sup>2</sup> ..... | 373,355                                   | 269,402                      | 32,727                    | 14,371   | 18,508                         | 32,051                         | 11,118  | 46,747                    | 42,612           | 71,268             |
| 1988 .....              | 375,287                                   | 272,458                      | 32,962                    | 13,867   | 19,077                         | 32,227                         | 11,135  | 47,565                    | 43,963           | 71,662             |
| 1989 .....              | 382,769                                   | 278,726                      | 33,616                    | 13,643   | 19,247                         | 32,482                         | 11,190  | 48,852                    | 45,528           | 74,168             |
| 1990 .....              | 397,159                                   | 289,534                      | 34,075                    | 13,984   | 19,774                         | 34,257                         | 11,316  | 49,989                    | 48,168           | 77,971             |
| 1991 .....              | 412,708                                   | 299,132                      | 34,710                    | 14,480   | 19,952                         | 34,610                         | 11,506  | 51,778                    | 51,343           | 80,753             |
| 1992 .....              | 430,797                                   | 312,762                      | 35,348                    | 15,347   | 20,355                         | 36,320                         | 11,827  | 54,177                    | 53,599           | 85,789             |
| 1993 .....              | 436,233                                   | 319,352                      | 35,318                    | 15,805   | 20,000                         | 36,298                         | 11,914  | 56,452                    | 54,680           | 88,885             |
| 1994 .....              | 431,758                                   | 318,698                      | 34,449                    | 16,042   | 19,579                         | 34,278                         | 12,199  | 58,143                    | 54,726           | 89,282             |
| 1995 .....              | 423,922                                   | 316,393                      | 33,470                    | 15,802   | 18,509                         | 33,509                         | 12,426  | 58,753                    | 54,243           | 89,681             |
| Engineering             |   |                              |                           |  |                                |                                |   |                           |                  |                    |
| Engineering,<br>total   | Aerospace<br>engi-<br>neering             | Chemical<br>engi-<br>neering | Civil<br>engi-<br>neering | Electrical<br>engi-<br>neering                     | Industrial<br>engi-<br>neering | Mechanical<br>engi-<br>neering | Metallur-<br>gical &<br>materials<br>engi-<br>neering | Other<br>engi-<br>neering | Health<br>fields |                    |
| 1975 .....              | 68,271                                    | 1,670                        | 5,034                     | 12,560   | 16,320                         | 11,663                         | 8,601   | 2,352                     | 10,071           | 25,519             |
| 1976 .....              | 66,657                                    | 1,477                        | 5,205                     | 11,995   | 15,926                         | 10,687                         | 8,313   | 2,375                     | 10,679           | 28,290             |
| 1977 .....              | 68,685                                    | 1,518                        | 5,201                     | 12,335   | 17,406                         | 10,438                         | 8,722   | 2,559                     | 10,506           | 33,675             |
| 1978 <sup>1</sup> ..... | 67,697                                    | 1,463                        | 5,341                     | 12,358   | 17,127                         | 9,494                          | 8,638   | 2,570                     | 10,706           | 35,611             |
| 1979 .....              | 71,728                                    | 1,481                        | 5,605                     | 12,822   | 17,715                         | 10,729                         | 9,251   | 2,756                     | 11,369           | 38,517             |
| 1980 .....              | 74,312                                    | 1,737                        | 6,015                     | 13,097   | 19,132                         | 9,698                          | 9,888   | 2,910                     | 11,835           | 41,462             |
| 1981 .....              | 79,555                                    | 1,883                        | 6,496                     | 14,089   | 20,113                         | 9,737                          | 10,618  | 3,125                     | 13,494           | 43,117             |
| 1982 .....              | 83,687                                    | 1,941                        | 7,189                     | 14,122   | 21,927                         | 9,577                          | 11,467  | 3,124                     | 14,340           | 43,418             |
| 1983 .....              | 91,119                                    | 2,305                        | 7,563                     | 14,910   | 25,295                         | 9,247                          | 12,911  | 3,447                     | 15,441           | 43,457             |
| 1984 <sup>2</sup> ..... | 92,712                                    | 2,340                        | 7,373                     | 15,192   | 26,388                         | 9,282                          | 13,855  | 3,657                     | 14,625           | 44,972             |
| 1985 <sup>2</sup> ..... | 95,991                                    | 2,538                        | 7,150                     | 14,902   | 28,203                         | 10,499                         | 14,157  | 3,943                     | 14,599           | 45,962             |
| 1986 <sup>2</sup> ..... | 101,874                                   | 2,804                        | 7,012                     | 14,976   | 29,969                         | 11,529                         | 15,713  | 4,208                     | 15,663           | 47,438             |
| 1987 <sup>2</sup> ..... | 103,953                                   | 3,015                        | 7,111                     | 14,682   | 31,399                         | 12,220                         | 16,366  | 4,366                     | 14,794           | 48,171             |
| 1988 .....              | 102,829                                   | 3,223                        | 6,618                     | 14,811   | 32,035                         | 11,393                         | 16,151  | 4,337                     | 14,261           | 49,384             |
| 1989 .....              | 104,043                                   | 3,524                        | 6,460                     | 14,909   | 33,257                         | 11,094                         | 16,265  | 4,594                     | 13,940           | 51,868             |
| 1990 .....              | 107,625                                   | 3,934                        | 6,735                     | 15,542   | 33,722                         | 11,248                         | 16,879  | 4,941                     | 14,624           | 55,091             |
| 1991 .....              | 113,576                                   | 4,120                        | 7,127                     | 17,398   | 35,182                         | 12,676                         | 17,730  | 5,160                     | 14,183           | 58,606             |
| 1992 .....              | 118,035                                   | 4,036                        | 7,397                     | 19,572   | 36,460                         | 13,525                         | 18,637  | 5,512                     | 12,896           | 63,029             |
| 1993 .....              | 116,881                                   | 3,940                        | 7,516                     | 19,583   | 35,337                         | 13,596                         | 18,477  | 5,363                     | 13,069           | 68,605             |
| 1994 .....              | 113,060                                   | 3,715                        | 7,608                     | 19,925   | 33,052                         | 13,696                         | 17,761  | 5,191                     | 12,112           | 73,501             |
| 1995 .....              | 107,529                                   | 3,343                        | 7,432                     | 19,218   | 31,060                         | 13,182                         | 16,360  | 4,920                     | 12,014           | 77,588             |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 3. Full-time graduate students in science, engineering, and health fields  
in all institutions, by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                     |                           |  |                                |                                |   |                           |            |                    | Health<br>fields |
|----------------------------|---|------------------------------|---------------------------|--|--------------------------------|--------------------------------|---|---------------------------|------------|--------------------|------------------|
|                            |   | Sciences,<br>total           | Physical<br>sciences      | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Mathe-<br>matical<br>sciences  | Computer<br>sciences           | Agricul-<br>tural<br>sciences                         | Biological<br>sciences    | Psychology | Social<br>sciences |                  |
| 1975 .....                 | 202,457                                   | 164,695                      | 21,916                    | 9,557  | 10,694                         | 4,473                          | 8,889   | 36,874                    | 24,105     | 48,187             |                  |
| 1976 .....                 | 204,928                                   | 168,046                      | 22,252                    | 10,091   | 10,952                         | 4,748                          | 9,436   | 37,905                    | 25,643     | 47,019             |                  |
| 1977 .....                 | 206,521                                   | 169,365                      | 22,505                    | 10,424   | 10,365                         | 4,604                          | 9,711   | 38,415                    | 25,703     | 47,638             |                  |
| 1978 <sup>1</sup> .....    | 201,830                                   | 164,325                      | 22,135                    | 10,369   | 9,769                          | 4,930                          | 9,727   | 37,788                    | 24,754     | 44,853             |                  |
| 1979 .....                 | 209,122                                   | 169,155                      | 22,535                    | 10,625   | 9,667                          | 5,853                          | 9,952   | 37,996                    | 25,848     | 46,679             |                  |
| 1980 .....                 | 214,509                                   | 171,882                      | 22,917                    | 10,871   | 9,901                          | 6,587                          | 10,168  | 37,690                    | 26,671     | 47,077             |                  |
| 1981 .....                 | 218,045                                   | 172,320                      | 23,307                    | 10,934   | 10,152                         | 7,445                          | 10,312  | 37,277                    | 26,570     | 46,323             |                  |
| 1982 .....                 | 221,955                                   | 172,200                      | 24,038                    | 11,319   | 10,813                         | 9,171                          | 10,136  | 36,688                    | 25,667     | 44,368             |                  |
| 1983 .....                 | 229,493                                   | 175,585                      | 25,204                    | 11,968   | 10,955                         | 10,600                         | 9,976   | 36,740                    | 26,561     | 43,581             |                  |
| 1984 <sup>2</sup> .....    | 231,052                                   | 175,885                      | 25,852                    | 11,734   | 11,309                         | 11,436                         | 9,908   | 37,114                    | 25,969     | 42,563             |                  |
| 1985 <sup>2</sup> .....    | 234,056                                   | 178,160                      | 26,669                    | 11,334   | 11,816                         | 13,861                         | 9,250   | 37,001                    | 25,335     | 42,894             |                  |
| 1986 <sup>2</sup> .....    | 242,841                                   | 182,675                      | 27,762                    | 11,249   | 12,388                         | 15,020                         | 9,341   | 37,810                    | 26,255     | 42,850             |                  |
| 1987 <sup>2</sup> .....    | 247,219                                   | 185,287                      | 28,412                    | 10,435   | 13,043                         | 15,336                         | 9,094   | 38,235                    | 27,256     | 43,476             |                  |
| 1988 .....                 | 250,667                                   | 187,660                      | 28,574                    | 10,192   | 13,512                         | 15,133                         | 9,122   | 39,209                    | 28,118     | 43,800             |                  |
| 1989 .....                 | 256,928                                   | 192,553                      | 29,207                    | 10,021   | 13,681                         | 15,606                         | 9,070   | 40,348                    | 29,348     | 45,272             |                  |
| 1990 .....                 | 265,423                                   | 199,446                      | 29,485                    | 10,244   | 13,865                         | 16,689                         | 9,100   | 40,945                    | 30,619     | 48,499             |                  |
| 1991 .....                 | 277,183                                   | 206,149                      | 30,117                    | 10,373   | 14,256                         | 16,516                         | 9,289   | 42,700                    | 32,258     | 50,640             |                  |
| 1992 .....                 | 290,654                                   | 216,228                      | 30,673                    | 10,986   | 14,679                         | 17,506                         | 9,452   | 44,389                    | 34,277     | 54,266             |                  |
| 1993 .....                 | 294,227                                   | 220,400                      | 30,611                    | 11,367   | 14,530                         | 17,399                         | 9,468   | 46,481                    | 34,894     | 55,650             |                  |
| 1994 .....                 | 293,324                                   | 221,756                      | 30,043                    | 11,470   | 14,226                         | 16,712                         | 9,492   | 48,017                    | 35,434     | 56,362             |                  |
| 1995 .....                 | 288,016                                   | 220,154                      | 28,892                    | 11,290   | 13,422                         | 16,564                         | 9,630   | 48,283                    | 35,762     | 56,311             |                  |
| Engineering                |   |                              |                           |  |                                |                                |   |                           |            |                    |                  |
| Engi-<br>neering,<br>total | Aerospace<br>engi-<br>neering             | Chemical<br>engi-<br>neering | Civil<br>engi-<br>neering | Electrical<br>engi-<br>neering                     | Industrial<br>engi-<br>neering | Mechanical<br>engi-<br>neering | Metallur-<br>gical &<br>materials<br>engi-<br>neering | Other<br>engi-<br>neering |            |                    |                  |
| 1975 .....                 | 37,762                                    | 1,245                        | 3,515                     | 7,363  | 8,278                          | 4,152                          | 4,931   | 1,787                     | 6,491      | 17,387             |                  |
| 1976 .....                 | 36,882                                    | 1,165                        | 3,691                     | 7,025  | 8,147                          | 3,578                          | 4,919   | 1,860                     | 6,497      | 18,585             |                  |
| 1977 .....                 | 37,156                                    | 1,187                        | 3,873                     | 7,094  | 8,528                          | 3,343                          | 4,883   | 1,951                     | 6,297      | 20,324             |                  |
| 1978 <sup>1</sup> .....    | 37,505                                    | 1,140                        | 3,938                     | 7,335  | 8,509                          | 3,249                          | 4,950   | 1,973                     | 6,411      | 21,248             |                  |
| 1979 .....                 | 39,967                                    | 1,152                        | 4,218                     | 7,623  | 9,039                          | 3,743                          | 5,428   | 2,135                     | 6,629      | 22,746             |                  |
| 1980 .....                 | 42,627                                    | 1,327                        | 4,490                     | 7,958  | 9,963                          | 3,736                          | 5,841   | 2,254                     | 7,058      | 23,983             |                  |
| 1981 .....                 | 45,725                                    | 1,483                        | 4,989                     | 8,799  | 10,450                         | 3,603                          | 6,422   | 2,454                     | 7,525      | 24,073             |                  |
| 1982 .....                 | 49,755                                    | 1,522                        | 5,608                     | 9,381  | 11,533                         | 3,807                          | 7,267   | 2,478                     | 8,159      | 22,875             |                  |
| 1983 .....                 | 53,908                                    | 1,840                        | 5,869                     | 9,804  | 13,265                         | 3,288                          | 8,330   | 2,704                     | 8,808      | 22,599             |                  |
| 1984 <sup>2</sup> .....    | 55,167                                    | 1,854                        | 5,734                     | 10,086   | 13,925                         | 3,393                          | 8,698   | 2,872                     | 8,605      | 22,907             |                  |
| 1985 <sup>2</sup> .....    | 55,896                                    | 1,994                        | 5,546                     | 9,749  | 14,799                         | 3,456                          | 8,875   | 3,093                     | 8,384      | 23,295             |                  |
| 1986 <sup>2</sup> .....    | 60,166                                    | 2,154                        | 5,594                     | 9,971  | 16,290                         | 3,807                          | 9,789   | 3,370                     | 9,191      | 23,356             |                  |
| 1987 <sup>2</sup> .....    | 61,932                                    | 2,372                        | 5,674                     | 9,628  | 17,101                         | 4,156                          | 10,230  | 3,436                     | 9,335      | 23,861             |                  |
| 1988 .....                 | 63,007                                    | 2,533                        | 5,359                     | 9,946  | 17,706                         | 4,295                          | 10,416  | 3,466                     | 9,286      | 24,537             |                  |
| 1989 .....                 | 64,375                                    | 2,772                        | 5,282                     | 9,964  | 18,466                         | 4,658                          | 10,492  | 3,720                     | 9,021      | 25,813             |                  |
| 1990 .....                 | 65,977                                    | 3,010                        | 5,443                     | 10,128   | 18,675                         | 4,770                          | 10,867  | 3,930                     | 9,154      | 27,431             |                  |
| 1991 .....                 | 71,034                                    | 3,325                        | 5,788                     | 11,328   | 19,904                         | 5,598                          | 11,687  | 4,058                     | 9,346      | 29,866             |                  |
| 1992 .....                 | 74,426                                    | 3,306                        | 5,946                     | 12,454   | 20,996                         | 6,081                          | 12,383  | 4,274                     | 8,986      | 32,099             |                  |
| 1993 .....                 | 73,827                                    | 3,262                        | 6,041                     | 12,458   | 20,400                         | 5,902                          | 12,395  | 4,249                     | 9,120      | 35,649             |                  |
| 1994 .....                 | 71,568                                    | 3,000                        | 6,105                     | 12,641   | 19,414                         | 5,910                          | 11,875  | 4,108                     | 8,515      | 39,129             |                  |
| 1995 .....                 | 67,862                                    | 2,693                        | 5,962                     | 12,248   | 18,303                         | 5,328                          | 11,119  | 3,880                     | 8,329      | 42,219             |                  |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 4. Part-time graduate students in science, engineering, and health fields  
in all institutions, by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                     |                           |  |                                |                                |   |                           |                  |                    |
|----------------------------|---|------------------------------|---------------------------|--|--------------------------------|--------------------------------|---|---------------------------|------------------|--------------------|
|                            |   | Sciences,<br>total           | Physical<br>sciences      | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences  | Computer<br>sciences           | Agri-<br>cultural<br>sciences                         | Biological<br>sciences    | Psychology       | Social<br>sciences |
| 1975 .....                 | 100,733                                   | 70,224                       | 4,394                     | 2,522  | 6,198                          | 3,942                          | 1,813   | 9,524                     | 12,086           | 29,745             |
| 1976 .....                 | 100,606                                   | 70,831                       | 4,379                     | 2,728  | 6,119                          | 3,879                          | 1,849   | 9,823                     | 11,815           | 30,239             |
| 1977 .....                 | 105,295                                   | 73,766                       | 4,350                     | 3,031  | 5,687                          | 4,504                          | 1,966   | 10,819                    | 12,914           | 30,495             |
| 1978 <sup>1</sup> .....    | 102,520                                   | 72,328                       | 4,139                     | 2,907  | 5,043                          | 4,917                          | 2,142   | 10,135                    | 12,768           | 30,277             |
| 1979 .....                 | 110,049                                   | 78,288                       | 4,160                     | 3,112  | 5,364                          | 5,837                          | 2,288   | 10,203                    | 13,918           | 33,406             |
| 1980 .....                 | 111,187                                   | 79,502                       | 4,017                     | 3,180  | 5,410                          | 6,991                          | 2,284   | 9,906                     | 13,939           | 33,775             |
| 1981 .....                 | 114,041                                   | 80,211                       | 4,050                     | 3,332  | 5,729                          | 8,992                          | 2,043   | 9,362                     | 14,096           | 32,607             |
| 1982 .....                 | 116,998                                   | 83,066                       | 4,148                     | 3,701  | 6,344                          | 10,641                         | 2,447   | 9,282                     | 14,406           | 32,097             |
| 1983 .....                 | 117,572                                   | 80,361                       | 4,249                     | 3,485  | 6,403                          | 12,733                         | 2,453   | 8,904                     | 14,344           | 27,790             |
| 1984 <sup>2</sup> .....    | 118,694                                   | 81,149                       | 4,204                     | 3,771  | 6,134                          | 14,090                         | 2,318   | 8,649                     | 14,962           | 27,021             |
| 1985 <sup>2</sup> .....    | 124,070                                   | 83,975                       | 4,312                     | 4,086  | 5,747                          | 15,908                         | 2,311   | 9,111                     | 15,386           | 27,114             |
| 1986 <sup>2</sup> .....    | 125,278                                   | 83,570                       | 4,484                     | 3,817  | 5,561                          | 16,329                         | 2,117   | 8,955                     | 14,986           | 27,321             |
| 1987 <sup>2</sup> .....    | 126,136                                   | 84,115                       | 4,315                     | 3,936  | 5,465                          | 16,715                         | 2,024   | 8,512                     | 15,356           | 27,792             |
| 1988 .....                 | 124,620                                   | 84,798                       | 4,388                     | 3,675  | 5,565                          | 17,094                         | 2,013   | 8,356                     | 15,845           | 27,862             |
| 1989 .....                 | 125,841                                   | 86,173                       | 4,409                     | 3,622  | 5,566                          | 16,876                         | 2,120   | 8,504                     | 16,180           | 28,896             |
| 1990 .....                 | 131,736                                   | 90,088                       | 4,590                     | 3,740  | 5,909                          | 17,568                         | 2,216   | 9,044                     | 17,549           | 29,472             |
| 1991 .....                 | 135,525                                   | 92,983                       | 4,593                     | 4,107  | 5,696                          | 18,094                         | 2,217   | 9,078                     | 19,085           | 30,113             |
| 1992 .....                 | 140,143                                   | 96,534                       | 4,675                     | 4,361  | 5,676                          | 18,814                         | 2,375   | 9,788                     | 19,322           | 31,523             |
| 1993 .....                 | 142,006                                   | 98,952                       | 4,707                     | 4,438  | 5,470                          | 18,899                         | 2,446   | 9,971                     | 19,786           | 33,235             |
| 1994 .....                 | 138,434                                   | 96,942                       | 4,406                     | 4,572  | 5,353                          | 17,566                         | 2,707   | 10,126                    | 19,292           | 32,920             |
| 1995 .....                 | 135,906                                   | 96,239                       | 4,578                     | 4,512  | 5,087                          | 16,945                         | 2,796   | 10,470                    | 18,481           | 33,370             |
| Engineering                |   |                              |                           |  |                                |                                |   |                           |                  |                    |
| Engi-<br>neering,<br>total | Aerospace<br>engi-<br>neering             | Chemical<br>engi-<br>neering | Civil<br>engi-<br>neering | Electrical<br>engi-<br>neering                     | Industrial<br>engi-<br>neering | Mechanical<br>engi-<br>neering | Metallur-<br>gical &<br>materials<br>engi-<br>neering | Other<br>engi-<br>neering | Health<br>fields |                    |
| 1975 .....                 | 30,509                                    | 425                          | 1,519                     | 5,197  | 8,042                          | 7,511                          | 3,670   | 565                       | 3,580            | 8,132              |
| 1976 .....                 | 29,775                                    | 312                          | 1,514                     | 4,970  | 7,779                          | 7,109                          | 3,394   | 515                       | 4,182            | 9,705              |
| 1977 .....                 | 31,529                                    | 331                          | 1,328                     | 5,241  | 8,878                          | 7,095                          | 3,839   | 608                       | 4,209            | 13,351             |
| 1978 <sup>1</sup> .....    | 30,192                                    | 323                          | 1,403                     | 5,023  | 8,618                          | 6,245                          | 3,688   | 597                       | 4,295            | 14,363             |
| 1979 .....                 | 31,761                                    | 329                          | 1,387                     | 5,199  | 8,676                          | 6,986                          | 3,823   | 621                       | 4,740            | 15,771             |
| 1980 .....                 | 31,685                                    | 410                          | 1,525                     | 5,139  | 9,169                          | 5,962                          | 4,047   | 656                       | 4,777            | 17,479             |
| 1981 .....                 | 33,830                                    | 400                          | 1,507                     | 5,290  | 9,663                          | 6,134                          | 4,196   | 671                       | 5,969            | 19,044             |
| 1982 .....                 | 33,932                                    | 419                          | 1,581                     | 4,741  | 10,394                         | 5,770                          | 4,200   | 646                       | 6,181            | 20,543             |
| 1983 .....                 | 37,211                                    | 465                          | 1,694                     | 5,106  | 12,030                         | 5,959                          | 4,581   | 743                       | 6,633            | 20,858             |
| 1984 <sup>2</sup> .....    | 37,545                                    | 486                          | 1,639                     | 5,106  | 12,463                         | 5,889                          | 5,157   | 785                       | 6,020            | 22,065             |
| 1985 <sup>2</sup> .....    | 40,095                                    | 544                          | 1,604                     | 5,153  | 13,404                         | 7,043                          | 5,282   | 850                       | 6,215            | 22,667             |
| 1986 <sup>2</sup> .....    | 41,708                                    | 650                          | 1,418                     | 5,005  | 13,679                         | 7,722                          | 5,924   | 838                       | 6,472            | 24,082             |
| 1987 <sup>2</sup> .....    | 42,021                                    | 643                          | 1,437                     | 5,054  | 14,298                         | 8,064                          | 6,136   | 930                       | 5,459            | 24,310             |
| 1988 .....                 | 39,822                                    | 690                          | 1,259                     | 4,865  | 14,329                         | 7,098                          | 5,735   | 871                       | 4,975            | 24,847             |
| 1989 .....                 | 39,668                                    | 752                          | 1,178                     | 4,945  | 14,791                         | 6,436                          | 5,773   | 874                       | 4,919            | 26,055             |
| 1990 .....                 | 41,648                                    | 924                          | 1,292                     | 5,414  | 15,047                         | 6,478                          | 6,012   | 1,011                     | 5,470            | 27,660             |
| 1991 .....                 | 42,542                                    | 795                          | 1,339                     | 6,070  | 15,278                         | 7,078                          | 6,043   | 1,102                     | 4,837            | 28,740             |
| 1992 .....                 | 43,609                                    | 730                          | 1,451                     | 7,118  | 15,464                         | 7,444                          | 6,254   | 1,238                     | 3,910            | 30,930             |
| 1993 .....                 | 43,054                                    | 678                          | 1,475                     | 7,125  | 14,937                         | 7,694                          | 6,082   | 1,114                     | 3,949            | 32,956             |
| 1994 .....                 | 41,492                                    | 715                          | 1,503                     | 7,284  | 13,638                         | 7,786                          | 5,886   | 1,083                     | 3,597            | 34,372             |
| 1995 .....                 | 39,667                                    | 650                          | 1,470                     | 6,970  | 12,757                         | 7,854                          | 5,241   | 1,040                     | 3,685            | 35,369             |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 5. Male graduate students in science, engineering, and health fields in all institutions,  
by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------|--------------------|------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology | Social<br>sciences |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1977 .....                 | 233,862                                   | 168,877                 | 22,816                 | 11,176   | 11,933                        | 7,549                     | 9,570  | 32,511                 | 20,518     | 52,804             |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1979 .....                 | 229,860                                   | 164,008                 | 22,202                 | 10,850   | 11,009                        | 9,367                     | 9,575  | 30,318                 | 19,424     | 51,263             |                  |
| 1980 .....                 | 231,280                                   | 163,307                 | 22,338                 | 10,844   | 11,247                        | 10,491                    | 9,594  | 29,295                 | 19,027     | 50,471             |                  |
| 1981 .....                 | 232,209                                   | 160,400                 | 22,348                 | 10,848   | 11,400                        | 12,228                    | 9,533  | 27,992                 | 17,900     | 48,151             |                  |
| 1982 .....                 | 235,361                                   | 160,449                 | 22,767                 | 11,297   | 12,079                        | 14,366                    | 9,498  | 26,797                 | 16,976     | 46,669             |                  |
| 1983 .....                 | 240,525                                   | 159,213                 | 23,576                 | 11,552   | 12,158                        | 16,719                    | 9,290  | 26,293                 | 16,648     | 42,977             |                  |
| 1984 <sup>2</sup> .....    | 242,179                                   | 159,764                 | 23,898                 | 11,632   | 12,275                        | 18,653                    | 9,088  | 26,246                 | 16,180     | 41,792             |                  |
| 1985 <sup>2</sup> .....    | 247,464                                   | 162,553                 | 24,474                 | 11,493   | 12,209                        | 22,208                    | 8,570  | 26,208                 | 15,597     | 41,794             |                  |
| 1986 <sup>2</sup> .....    | 253,696                                   | 164,187                 | 25,384                 | 11,119   | 12,470                        | 23,497                    | 8,505  | 26,294                 | 15,377     | 41,541             |                  |
| 1987 <sup>2</sup> .....    | 256,158                                   | 165,168                 | 25,613                 | 10,592   | 12,912                        | 24,036                    | 8,166  | 26,314                 | 15,683     | 41,852             |                  |
| 1988 .....                 | 254,011                                   | 164,306                 | 25,465                 | 10,062   | 13,301                        | 24,033                    | 8,038  | 26,304                 | 15,502     | 41,601             |                  |
| 1989 .....                 | 256,861                                   | 166,418                 | 25,815                 | 9,785  | 13,262                        | 24,494                    | 8,045  | 26,618                 | 15,673     | 42,726             |                  |
| 1990 .....                 | 263,407                                   | 170,454                 | 26,007                 | 9,865  | 13,575                        | 26,058                    | 7,981  | 26,947                 | 15,822     | 44,199             |                  |
| 1991 .....                 | 271,853                                   | 173,992                 | 26,146                 | 10,025   | 13,654                        | 26,340                    | 7,939  | 27,643                 | 16,556     | 45,689             |                  |
| 1992 .....                 | 280,465                                   | 179,663                 | 26,504                 | 10,489   | 13,806                        | 27,853                    | 8,059  | 28,702                 | 16,695     | 47,555             |                  |
| 1993 .....                 | 279,476                                   | 180,287                 | 26,116                 | 10,745   | 13,362                        | 27,826                    | 7,826  | 29,399                 | 16,612     | 48,401             |                  |
| 1994 .....                 | 272,420                                   | 177,414                 | 25,290                 | 10,689   | 13,044                        | 26,126                    | 7,911  | 29,988                 | 16,486     | 47,880             |                  |
| 1995 .....                 | 263,058                                   | 173,681                 | 24,359                 | 10,323   | 12,248                        | 25,334                    | 7,975  | 29,934                 | 16,101     | 47,407             |                  |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering |            |                    |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1977 .....                 | 64,985                                    | 1,485                   | 4,827                  | 11,507   | 16,696                        | 9,683                     | 8,449  | 2,376                  | 9,962      | 11,109             |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1979 .....                 | 65,852                                    | 1,432                   | 4,991                  | 11,503   | 16,782                        | 9,473                     | 8,782  | 2,468                  | 10,421     | 11,028             |                  |
| 1980 .....                 | 67,973                                    | 1,663                   | 5,336                  | 11,732   | 18,149                        | 8,343                     | 9,354  | 2,607                  | 10,789     | 11,707             |                  |
| 1981 .....                 | 71,809                                    | 1,816                   | 5,718                  | 12,515   | 18,837                        | 8,194                     | 9,987  | 2,735                  | 12,007     | 11,367             |                  |
| 1982 .....                 | 74,912                                    | 1,831                   | 6,288                  | 12,373   | 20,376                        | 7,958                     | 10,748   | 2,704                  | 12,634     | 10,958             |                  |
| 1983 .....                 | 81,312                                    | 2,182                   | 6,547                  | 13,051   | 23,227                        | 7,729                     | 12,106   | 2,999                  | 13,471     | 10,430             |                  |
| 1984 <sup>2</sup> .....    | 82,415                                    | 2,208                   | 6,401                  | 13,165   | 24,175                        | 7,674                     | 12,899   | 3,189                  | 12,704     | 10,501             |                  |
| 1985 <sup>2</sup> .....    | 84,911                                    | 2,375                   | 6,146                  | 12,755   | 25,768                        | 8,719                     | 13,146   | 3,340                  | 12,662     | 10,795             |                  |
| 1986 <sup>2</sup> .....    | 89,509                                    | 2,604                   | 5,973                  | 12,829   | 27,061                        | 9,434                     | 14,554   | 3,533                  | 13,521     | 11,049             |                  |
| 1987 <sup>2</sup> .....    | 90,990                                    | 2,791                   | 5,957                  | 12,579   | 28,301                        | 9,976                     | 15,070   | 3,637                  | 12,679     | 11,795             |                  |
| 1988 .....                 | 89,705                                    | 2,996                   | 5,543                  | 12,517   | 28,757                        | 9,300                     | 14,749   | 3,581                  | 12,262     | 11,429             |                  |
| 1989 .....                 | 90,443                                    | 3,281                   | 5,431                  | 12,474   | 29,742                        | 8,984                     | 14,867   | 3,784                  | 11,880     | 11,906             |                  |
| 1990 .....                 | 92,953                                    | 3,645                   | 5,589                  | 12,853   | 30,007                        | 9,111                     | 15,437   | 4,048                  | 12,263     | 12,306             |                  |
| 1991 .....                 | 97,861                                    | 3,793                   | 5,870                  | 14,296   | 31,311                        | 10,321                    | 16,219   | 4,173                  | 11,878     | 13,064             |                  |
| 1992 .....                 | 100,802                                   | 3,688                   | 6,003                  | 15,918   | 32,167                        | 10,870                    | 16,939   | 4,443                  | 10,774     | 13,848             |                  |
| 1993 .....                 | 99,189                                    | 3,583                   | 6,017                  | 15,725   | 31,015                        | 11,003                    | 16,703   | 4,336                  | 10,807     | 15,224             |                  |
| 1994 .....                 | 95,006                                    | 3,357                   | 6,082                  | 15,714   | 28,948                        | 10,896                    | 15,938   | 4,122                  | 9,949      | 16,337             |                  |
| 1995 .....                 | 89,377                                    | 2,992                   | 5,874                  | 14,986   | 26,858                        | 10,387                    | 14,690   | 3,861                  | 9,729      | 17,251             |                  |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 6. Female graduate students in science, engineering, and health fields in all institutions,  
by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------|--------------------|------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology | Social<br>sciences |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1977 .....                 | 77,954                                    | 74,254                  | 4,039                  | 2,279  | 4,119                         | 1,559                     | 2,107  | 16,723                 | 18,099     | 25,329             |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1979 .....                 | 89,311                                    | 83,435                  | 4,493                  | 2,887  | 4,022                         | 2,323                     | 2,665  | 17,881                 | 20,342     | 28,822             |                  |
| 1980 .....                 | 94,416                                    | 88,077                  | 4,596                  | 3,207  | 4,064                         | 3,087                     | 2,858  | 18,301                 | 21,583     | 30,381             |                  |
| 1981 .....                 | 99,877                                    | 92,131                  | 5,009                  | 3,418  | 4,481                         | 4,209                     | 2,822  | 18,647                 | 22,766     | 30,779             |                  |
| 1982 .....                 | 103,592                                   | 94,817                  | 5,419                  | 3,723  | 5,078                         | 5,446                     | 3,085  | 19,173                 | 23,097     | 29,796             |                  |
| 1983 .....                 | 106,540                                   | 96,733                  | 5,877                  | 3,901  | 5,200                         | 6,614                     | 3,139  | 19,351                 | 24,257     | 28,394             |                  |
| 1984 <sup>2</sup> .....    | 107,567                                   | 97,270                  | 6,158                  | 3,873  | 5,168                         | 6,873                     | 3,138  | 19,517                 | 24,751     | 27,792             |                  |
| 1985 <sup>2</sup> .....    | 110,662                                   | 99,582                  | 6,507                  | 3,927  | 5,354                         | 7,561                     | 2,991  | 19,904                 | 25,124     | 28,214             |                  |
| 1986 <sup>2</sup> .....    | 114,423                                   | 102,058                 | 6,862                  | 3,947  | 5,479                         | 7,852                     | 2,953  | 20,471                 | 25,864     | 28,630             |                  |
| 1987 <sup>2</sup> .....    | 117,197                                   | 104,234                 | 7,114                  | 3,779  | 5,596                         | 8,015                     | 2,952  | 20,433                 | 26,929     | 29,416             |                  |
| 1988 .....                 | 121,276                                   | 108,152                 | 7,497                  | 3,805  | 5,776                         | 8,194                     | 3,097  | 21,261                 | 28,461     | 30,061             |                  |
| 1989 .....                 | 125,908                                   | 112,308                 | 7,801                  | 3,858  | 5,985                         | 7,988                     | 3,145  | 22,234                 | 29,855     | 31,442             |                  |
| 1990 .....                 | 133,752                                   | 119,080                 | 8,068                  | 4,119  | 6,199                         | 8,199                     | 3,335  | 23,042                 | 32,346     | 33,772             |                  |
| 1991 .....                 | 140,855                                   | 125,140                 | 8,564                  | 4,455  | 6,298                         | 8,270                     | 3,567  | 24,135                 | 34,787     | 35,064             |                  |
| 1992 .....                 | 150,332                                   | 133,099                 | 8,844                  | 4,858  | 6,549                         | 8,467                     | 3,768  | 25,475                 | 36,904     | 38,234             |                  |
| 1993 .....                 | 156,757                                   | 139,065                 | 9,202                  | 5,060  | 6,638                         | 8,472                     | 4,088  | 27,053                 | 38,068     | 40,484             |                  |
| 1994 .....                 | 159,338                                   | 141,284                 | 9,159                  | 5,353  | 6,535                         | 8,152                     | 4,288  | 28,155                 | 38,240     | 41,402             |                  |
| 1995 .....                 | 160,864                                   | 142,712                 | 9,111                  | 5,479  | 6,261                         | 8,175                     | 4,451  | 28,819                 | 38,142     | 42,274             |                  |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering |            |                    |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1977 .....                 | 3,700                                     | 33                      | 374                    | 828  | 710                           | 755                       | 273  | 183                    | 544        | 22,566             |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1979 .....                 | 5,876                                     | 49                      | 614                    | 1,319  | 933                           | 1,256                     | 469  | 288                    | 948        | 27,489             |                  |
| 1980 .....                 | 6,339                                     | 74                      | 679                    | 1,365  | 983                           | 1,355                     | 534  | 303                    | 1,046      | 29,755             |                  |
| 1981 .....                 | 7,746                                     | 67                      | 778                    | 1,574  | 1,276                         | 1,543                     | 631  | 390                    | 1,487      | 31,750             |                  |
| 1982 .....                 | 8,775                                     | 110                     | 901                    | 1,749  | 1,551                         | 1,619                     | 719  | 420                    | 1,706      | 32,460             |                  |
| 1983 .....                 | 9,807                                     | 123                     | 1,016                  | 1,859  | 2,068                         | 1,518                     | 805  | 448                    | 1,970      | 33,027             |                  |
| 1984 <sup>2</sup> .....    | 10,297                                    | 132                     | 972                    | 2,027  | 2,213                         | 1,608                     | 956  | 468                    | 1,921      | 34,471             |                  |
| 1985 <sup>2</sup> .....    | 11,080                                    | 163                     | 1,004                  | 2,147  | 2,435                         | 1,780                     | 1,011  | 603                    | 1,937      | 35,167             |                  |
| 1986 <sup>2</sup> .....    | 12,365                                    | 200                     | 1,039                  | 2,147  | 2,908                         | 2,095                     | 1,159  | 675                    | 2,142      | 36,389             |                  |
| 1987 <sup>2</sup> .....    | 12,963                                    | 224                     | 1,154                  | 2,103  | 3,098                         | 2,244                     | 1,296  | 729                    | 2,115      | 36,376             |                  |
| 1988 .....                 | 13,124                                    | 227                     | 1,075                  | 2,294  | 3,278                         | 2,093                     | 1,402  | 756                    | 1,999      | 37,955             |                  |
| 1989 .....                 | 13,600                                    | 243                     | 1,029                  | 2,435  | 3,515                         | 2,110                     | 1,398  | 810                    | 2,060      | 39,962             |                  |
| 1990 .....                 | 14,672                                    | 289                     | 1,146                  | 2,689  | 3,715                         | 2,137                     | 1,442  | 893                    | 2,361      | 42,785             |                  |
| 1991 .....                 | 15,715                                    | 327                     | 1,257                  | 3,102  | 3,871                         | 2,355                     | 1,511  | 987                    | 2,305      | 45,542             |                  |
| 1992 .....                 | 17,233                                    | 348                     | 1,394                  | 3,654  | 4,293                         | 2,655                     | 1,698  | 1,069                  | 2,122      | 49,181             |                  |
| 1993 .....                 | 17,692                                    | 357                     | 1,499                  | 3,858  | 4,322                         | 2,593                     | 1,774  | 1,027                  | 2,262      | 53,381             |                  |
| 1994 .....                 | 18,054                                    | 358                     | 1,526                  | 4,211  | 4,104                         | 2,800                     | 1,823  | 1,069                  | 2,163      | 57,164             |                  |
| 1995 .....                 | 18,152                                    | 351                     | 1,558                  | 4,232  | 4,202                         | 2,795                     | 1,670  | 1,059                  | 2,285      | 60,337             |                  |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 7. Male full-time graduate students in science, engineering, and health fields in all institutions,  
by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------|--------------------|------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology | Social<br>sciences |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1976 .....                 | 156,207                                   | 121,350                 | 19,205                 | 8,457  | 8,476                         | 4,006                     | 7,945  | 26,183                 | 14,591     | 32,487             |                  |
| 1977 .....                 | 154,440                                   | 119,541                 | 19,293                 | 8,641  | 8,083                         | 3,845                     | 7,903  | 25,866                 | 13,949     | 31,961             |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1979 .....                 | 152,029                                   | 115,492                 | 19,044                 | 8,404  | 7,497                         | 4,803                     | 7,745  | 24,480                 | 13,277     | 30,242             |                  |
| 1980 .....                 | 153,163                                   | 114,390                 | 19,214                 | 8,388  | 7,595                         | 5,184                     | 7,778  | 23,804                 | 12,779     | 29,648             |                  |
| 1981 .....                 | 154,090                                   | 112,978                 | 19,306                 | 8,361  | 7,612                         | 5,718                     | 7,884  | 23,189                 | 12,007     | 28,901             |                  |
| 1982 .....                 | 156,423                                   | 111,915                 | 19,641                 | 8,532  | 8,022                         | 6,860                     | 7,592  | 22,144                 | 11,223     | 27,901             |                  |
| 1983 .....                 | 161,556                                   | 113,267                 | 20,371                 | 8,995  | 8,037                         | 7,961                     | 7,448  | 21,961                 | 11,361     | 27,133             |                  |
| 1984 <sup>2</sup> .....    | 162,418                                   | 113,298                 | 20,755                 | 8,876  | 8,328                         | 8,693                     | 7,328  | 22,012                 | 10,714     | 26,592             |                  |
| 1985 <sup>2</sup> .....    | 164,239                                   | 114,624                 | 21,241                 | 8,500  | 8,614                         | 10,806                    | 6,853  | 21,798                 | 10,232     | 26,580             |                  |
| 1986 <sup>2</sup> .....    | 169,881                                   | 116,685                 | 22,022                 | 8,336  | 8,984                         | 11,703                    | 6,955  | 21,993                 | 10,263     | 26,429             |                  |
| 1987 <sup>2</sup> .....    | 172,149                                   | 117,500                 | 22,384                 | 7,759  | 9,481                         | 12,005                    | 6,716  | 22,099                 | 10,422     | 26,634             |                  |
| 1988 .....                 | 172,348                                   | 116,960                 | 22,208                 | 7,444  | 9,794                         | 11,795                    | 6,640  | 22,404                 | 10,199     | 26,476             |                  |
| 1989 .....                 | 175,118                                   | 118,879                 | 22,547                 | 7,268  | 9,746                         | 12,355                    | 6,557  | 22,736                 | 10,467     | 27,203             |                  |
| 1990 .....                 | 178,708                                   | 121,429                 | 22,664                 | 7,317  | 9,821                         | 13,218                    | 6,454  | 22,789                 | 10,642     | 28,524             |                  |
| 1991 .....                 | 185,098                                   | 123,747                 | 22,845                 | 7,197  | 10,035                        | 13,035                    | 6,424  | 23,498                 | 10,957     | 29,756             |                  |
| 1992 .....                 | 191,855                                   | 128,093                 | 23,173                 | 7,588  | 10,250                        | 13,947                    | 6,454  | 24,230                 | 11,216     | 31,235             |                  |
| 1993 .....                 | 190,972                                   | 128,344                 | 22,888                 | 7,815  | 10,096                        | 13,805                    | 6,281  | 24,920                 | 11,229     | 31,310             |                  |
| 1994 .....                 | 186,839                                   | 126,848                 | 22,277                 | 7,676  | 9,810                         | 13,153                    | 6,166  | 25,493                 | 11,187     | 31,086             |                  |
| 1995 .....                 | 180,211                                   | 123,887                 | 21,232                 | 7,389  | 9,219                         | 12,899                    | 6,174  | 25,284                 | 11,116     | 30,574             |                  |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |            |                    |                  |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering |            |                    |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1976 .....                 | 34,857                                    | 1,142                   | 3,457                  | 6,512  | 7,850                         | 3,199                     | 4,797  | 1,751                  | 6,149      | 7,503              |                  |
| 1977 .....                 | 34,899                                    | 1,160                   | 3,595                  | 6,553  | 8,146                         | 2,967                     | 4,742  | 1,809                  | 5,927      | 7,490              |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1979 .....                 | 36,537                                    | 1,116                   | 3,789                  | 6,729  | 8,585                         | 3,164                     | 5,170  | 1,922                  | 6,062      | 7,595              |                  |
| 1980 .....                 | 38,773                                    | 1,273                   | 4,025                  | 7,059  | 9,405                         | 3,071                     | 5,525  | 2,023                  | 6,392      | 7,725              |                  |
| 1981 .....                 | 41,112                                    | 1,432                   | 4,456                  | 7,673  | 9,739                         | 2,915                     | 6,075  | 2,167                  | 6,655      | 7,403              |                  |
| 1982 .....                 | 44,508                                    | 1,449                   | 4,936                  | 8,140  | 10,715                        | 3,042                     | 6,834  | 2,170                  | 7,222      | 6,869              |                  |
| 1983 .....                 | 48,289                                    | 1,760                   | 5,100                  | 8,509  | 12,302                        | 2,673                     | 7,847  | 2,380                  | 7,718      | 6,678              |                  |
| 1984 <sup>2</sup> .....    | 49,120                                    | 1,768                   | 5,002                  | 8,648  | 12,775                        | 2,769                     | 8,137  | 2,518                  | 7,503      | 6,675              |                  |
| 1985 <sup>2</sup> .....    | 49,615                                    | 1,868                   | 4,792                  | 8,257  | 13,591                        | 2,821                     | 8,316  | 2,654                  | 7,316      | 6,747              |                  |
| 1986 <sup>2</sup> .....    | 53,196                                    | 2,006                   | 4,806                  | 8,484  | 14,823                        | 3,073                     | 9,162  | 2,849                  | 7,993      | 6,707              |                  |
| 1987 <sup>2</sup> .....    | 54,649                                    | 2,205                   | 4,800                  | 8,230  | 15,552                        | 3,422                     | 9,498  | 2,867                  | 8,075      | 7,292              |                  |
| 1988 .....                 | 55,388                                    | 2,365                   | 4,567                  | 8,381  | 16,024                        | 3,559                     | 9,581  | 2,887                  | 8,024      | 7,231              |                  |
| 1989 .....                 | 56,239                                    | 2,592                   | 4,486                  | 8,315  | 16,644                        | 3,751                     | 9,637  | 3,081                  | 7,733      | 7,685              |                  |
| 1990 .....                 | 57,279                                    | 2,811                   | 4,547                  | 8,347  | 16,719                        | 3,862                     | 10,019   | 3,238                  | 7,736      | 8,029              |                  |
| 1991 .....                 | 61,351                                    | 3,071                   | 4,803                  | 9,309  | 17,739                        | 4,556                     | 10,745   | 3,316                  | 7,812      | 8,450              |                  |
| 1992 .....                 | 63,762                                    | 3,043                   | 4,849                  | 10,126   | 18,570                        | 4,906                     | 11,297   | 3,467                  | 7,504      | 9,033              |                  |
| 1993 .....                 | 62,628                                    | 2,971                   | 4,875                  | 9,934  | 17,956                        | 4,729                     | 11,210   | 3,447                  | 7,506      | 9,926              |                  |
| 1994 .....                 | 59,991                                    | 2,722                   | 4,912                  | 9,855  | 17,023                        | 4,612                     | 10,658   | 3,268                  | 6,941      | 10,775             |                  |
| 1995 .....                 | 56,324                                    | 2,417                   | 4,742                  | 9,431  | 15,835                        | 4,158                     | 9,988  | 3,064                  | 6,689      | 11,484             |                  |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 8. Female full-time graduate students in science, engineering, and health fields in all institutions,  
by field: 1975-95**

Page 1 of 1

| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------|--------------------|------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology | Social<br>sciences |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1976 .....                 | 48,721                                    | 46,696                  | 3,047                  | 1,634  | 2,476                         | 742                       | 1,491  | 11,722                 | 11,052     | 14,532             |                  |
| 1977 .....                 | 52,081                                    | 49,824                  | 3,212                  | 1,783  | 2,282                         | 759                       | 1,808  | 12,549                 | 11,754     | 15,677             |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1979 .....                 | 57,093                                    | 53,663                  | 3,491                  | 2,221  | 2,170                         | 1,050                     | 2,207  | 13,516                 | 12,571     | 16,437             |                  |
| 1980 .....                 | 61,346                                    | 57,492                  | 3,703                  | 2,483  | 2,306                         | 1,403                     | 2,390  | 13,886                 | 13,892     | 17,429             |                  |
| 1981 .....                 | 63,955                                    | 59,342                  | 4,001                  | 2,573  | 2,540                         | 1,727                     | 2,428  | 14,088                 | 14,563     | 17,422             |                  |
| 1982 .....                 | 65,532                                    | 60,285                  | 4,397                  | 2,787  | 2,791                         | 2,311                     | 2,544  | 14,544                 | 14,444     | 16,467             |                  |
| 1983 .....                 | 67,937                                    | 62,318                  | 4,833                  | 2,973  | 2,918                         | 2,639                     | 2,528  | 14,779                 | 15,200     | 16,448             |                  |
| 1984 <sup>2</sup> .....    | 68,634                                    | 62,587                  | 5,097                  | 2,858  | 2,981                         | 2,743                     | 2,580  | 15,102                 | 15,255     | 15,971             |                  |
| 1985 <sup>2</sup> .....    | 69,817                                    | 63,536                  | 5,428                  | 2,834  | 3,202                         | 3,055                     | 2,397  | 15,203                 | 15,103     | 16,314             |                  |
| 1986 <sup>2</sup> .....    | 72,960                                    | 65,990                  | 5,740                  | 2,913  | 3,404                         | 3,317                     | 2,386  | 15,817                 | 15,992     | 16,421             |                  |
| 1987 <sup>2</sup> .....    | 75,070                                    | 67,787                  | 6,028                  | 2,676  | 3,562                         | 3,331                     | 2,378  | 16,136                 | 16,834     | 16,842             |                  |
| 1988 .....                 | 78,319                                    | 70,700                  | 6,366                  | 2,748  | 3,718                         | 3,338                     | 2,482  | 16,805                 | 17,919     | 17,324             |                  |
| 1989 .....                 | 81,810                                    | 73,674                  | 6,660                  | 2,753  | 3,935                         | 3,251                     | 2,513  | 17,612                 | 18,881     | 18,069             |                  |
| 1990 .....                 | 86,715                                    | 78,017                  | 6,821                  | 2,927  | 4,044                         | 3,471                     | 2,646  | 18,156                 | 19,977     | 19,975             |                  |
| 1991 .....                 | 92,085                                    | 82,402                  | 7,272                  | 3,176  | 4,221                         | 3,481                     | 2,865  | 19,202                 | 21,301     | 20,884             |                  |
| 1992 .....                 | 98,799                                    | 88,135                  | 7,500                  | 3,398  | 4,429                         | 3,559                     | 2,998  | 20,159                 | 23,061     | 23,031             |                  |
| 1993 .....                 | 103,255                                   | 92,056                  | 7,723                  | 3,552  | 4,434                         | 3,594                     | 3,187  | 21,561                 | 23,665     | 24,340             |                  |
| 1994 .....                 | 106,485                                   | 94,908                  | 7,766                  | 3,794  | 4,416                         | 3,559                     | 3,326  | 22,524                 | 24,247     | 25,276             |                  |
| 1995 .....                 | 107,805                                   | 96,267                  | 7,660                  | 3,901  | 4,203                         | 3,665                     | 3,456  | 22,999                 | 24,646     | 25,737             |                  |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |            |                    |                  |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering |            |                    |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1976 .....                 | 2,025                                     | 23                      | 234                    | 513  | 297                           | 379                       | 122  | 109                    | 348        | 11,082             |                  |
| 1977 .....                 | 2,257                                     | 27                      | 278                    | 541  | 382                           | 376                       | 141  | 142                    | 370        | 12,834             |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |                  |
| 1979 .....                 | 3,430                                     | 36                      | 429                    | 894  | 454                           | 579                       | 258  | 213                    | 567        | 15,151             |                  |
| 1980 .....                 | 3,854                                     | 54                      | 465                    | 899  | 558                           | 665                       | 316  | 231                    | 666        | 16,258             |                  |
| 1981 .....                 | 4,613                                     | 51                      | 533                    | 1,126  | 711                           | 688                       | 347  | 287                    | 870        | 16,670             |                  |
| 1982 .....                 | 5,247                                     | 73                      | 672                    | 1,241  | 818                           | 765                       | 433  | 308                    | 937        | 16,006             |                  |
| 1983 .....                 | 5,619                                     | 80                      | 769                    | 1,295  | 963                           | 615                       | 483  | 324                    | 1,090      | 15,921             |                  |
| 1984 <sup>2</sup> .....    | 6,047                                     | 86                      | 732                    | 1,438  | 1,150                         | 624                       | 561  | 354                    | 1,102      | 16,232             |                  |
| 1985 <sup>2</sup> .....    | 6,281                                     | 126                     | 754                    | 1,492  | 1,208                         | 635                       | 559  | 439                    | 1,068      | 16,548             |                  |
| 1986 <sup>2</sup> .....    | 6,970                                     | 148                     | 788                    | 1,487  | 1,467                         | 734                       | 627  | 521                    | 1,198      | 16,649             |                  |
| 1987 <sup>2</sup> .....    | 7,283                                     | 167                     | 874                    | 1,398  | 1,549                         | 734                       | 732  | 569                    | 1,260      | 16,569             |                  |
| 1988 .....                 | 7,619                                     | 168                     | 792                    | 1,565  | 1,682                         | 736                       | 835  | 579                    | 1,262      | 17,306             |                  |
| 1989 .....                 | 8,136                                     | 180                     | 796                    | 1,649  | 1,822                         | 907                       | 855  | 639                    | 1,288      | 18,128             |                  |
| 1990 .....                 | 8,698                                     | 199                     | 896                    | 1,781  | 1,956                         | 908                       | 848  | 692                    | 1,418      | 19,402             |                  |
| 1991 .....                 | 9,683                                     | 254                     | 985                    | 2,019  | 2,165                         | 1,042                     | 942  | 742                    | 1,534      | 21,416             |                  |
| 1992 .....                 | 10,664                                    | 263                     | 1,097                  | 2,328  | 2,426                         | 1,175                     | 1,086  | 807                    | 1,482      | 23,066             |                  |
| 1993 .....                 | 11,199                                    | 291                     | 1,166                  | 2,524  | 2,444                         | 1,173                     | 1,185  | 802                    | 1,614      | 25,723             |                  |
| 1994 .....                 | 11,577                                    | 278                     | 1,193                  | 2,786  | 2,391                         | 1,298                     | 1,217  | 840                    | 1,574      | 28,354             |                  |
| 1995 .....                 | 11,538                                    | 276                     | 1,220                  | 2,817  | 2,468                         | 1,170                     | 1,131  | 816                    | 1,640      | 30,735             |                  |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 9. Male part-time graduate students in science, engineering, and health fields in all institutions,  
by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |            |                    |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------|--------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology | Social<br>sciences |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |
| 1977 .....                 | 79,422                                    | 49,336                  | 3,523                  | 2,535  | 3,850                         | 3,704                     | 1,667  | 6,645                  | 6,569      | 20,843             |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |
| 1979 .....                 | 77,831                                    | 48,516                  | 3,158                  | 2,446  | 3,512                         | 4,564                     | 1,830  | 5,838                  | 6,147      | 21,021             |
| 1980 .....                 | 78,117                                    | 48,917                  | 3,124                  | 2,456  | 3,652                         | 5,307                     | 1,816  | 5,491                  | 6,248      | 20,823             |
| 1981 .....                 | 78,119                                    | 47,422                  | 3,042                  | 2,487  | 3,788                         | 6,510                     | 1,649  | 4,803                  | 5,893      | 19,250             |
| 1982 .....                 | 78,938                                    | 48,534                  | 3,126                  | 2,765  | 4,057                         | 7,506                     | 1,906  | 4,653                  | 5,753      | 18,768             |
| 1983 .....                 | 78,969                                    | 45,946                  | 3,205                  | 2,557  | 4,121                         | 8,758                     | 1,842  | 4,332                  | 5,287      | 15,844             |
| 1984 <sup>2</sup> .....    | 79,761                                    | 46,466                  | 3,143                  | 2,756  | 3,947                         | 9,960                     | 1,760  | 4,234                  | 5,466      | 15,200             |
| 1985 <sup>2</sup> .....    | 83,225                                    | 47,929                  | 3,233                  | 2,993  | 3,595                         | 11,402                    | 1,717  | 4,410                  | 5,365      | 15,214             |
| 1986 <sup>2</sup> .....    | 83,815                                    | 47,502                  | 3,362                  | 2,783  | 3,486                         | 11,794                    | 1,550  | 4,301                  | 5,114      | 15,112             |
| 1987 <sup>2</sup> .....    | 84,009                                    | 47,668                  | 3,229                  | 2,833  | 3,431                         | 12,031                    | 1,450  | 4,215                  | 5,261      | 15,218             |
| 1988 .....                 | 81,663                                    | 47,346                  | 3,257                  | 2,618  | 3,507                         | 12,238                    | 1,398  | 3,900                  | 5,303      | 15,125             |
| 1989 .....                 | 81,743                                    | 47,539                  | 3,268                  | 2,517  | 3,516                         | 12,139                    | 1,488  | 3,882                  | 5,206      | 15,523             |
| 1990 .....                 | 84,699                                    | 49,025                  | 3,343                  | 2,548  | 3,754                         | 12,840                    | 1,527  | 4,158                  | 5,180      | 15,675             |
| 1991 .....                 | 86,755                                    | 50,245                  | 3,301                  | 2,828  | 3,619                         | 13,305                    | 1,515  | 4,145                  | 5,599      | 15,933             |
| 1992 .....                 | 88,610                                    | 51,570                  | 3,331                  | 2,901  | 3,556                         | 13,906                    | 1,605  | 4,472                  | 5,479      | 16,320             |
| 1993 .....                 | 88,504                                    | 51,943                  | 3,228                  | 2,930  | 3,266                         | 14,021                    | 1,545  | 4,479                  | 5,383      | 17,091             |
| 1994 .....                 | 85,581                                    | 50,566                  | 3,013                  | 3,013  | 3,234                         | 12,973                    | 1,745  | 4,495                  | 5,299      | 16,794             |
| 1995 .....                 | 82,847                                    | 49,794                  | 3,127                  | 2,934  | 3,029                         | 12,435                    | 1,801  | 4,650                  | 4,985      | 16,833             |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |            | Health<br>fields   |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering |            |                    |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |
| 1977 .....                 | 30,086                                    | 325                     | 1,232                  | 4,954  | 8,550                         | 6,716                     | 3,707  | 567                    | 4,035      | 3,619              |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 |
| 1979 .....                 | 29,315                                    | 316                     | 1,202                  | 4,774  | 8,197                         | 6,309                     | 3,612  | 546                    | 4,359      | 3,433              |
| 1980 .....                 | 29,200                                    | 390                     | 1,311                  | 4,673  | 8,744                         | 5,272                     | 3,829  | 584                    | 4,397      | 3,982              |
| 1981 .....                 | 30,697                                    | 384                     | 1,262                  | 4,842  | 9,098                         | 5,279                     | 3,912  | 568                    | 5,352      | 3,964              |
| 1982 .....                 | 30,404                                    | 382                     | 1,352                  | 4,233  | 9,661                         | 4,916                     | 3,914  | 534                    | 5,412      | 4,089              |
| 1983 .....                 | 33,023                                    | 422                     | 1,447                  | 4,542  | 10,925                        | 5,056                     | 4,259  | 619                    | 5,753      | 3,752              |
| 1984 <sup>2</sup> .....    | 33,295                                    | 440                     | 1,399                  | 4,517  | 11,400                        | 4,905                     | 4,762  | 671                    | 5,201      | 3,826              |
| 1985 <sup>2</sup> .....    | 35,296                                    | 507                     | 1,354                  | 4,498  | 12,177                        | 5,898                     | 4,830  | 686                    | 5,346      | 4,048              |
| 1986 <sup>2</sup> .....    | 36,313                                    | 598                     | 1,167                  | 4,345  | 12,238                        | 6,361                     | 5,392  | 684                    | 5,528      | 4,342              |
| 1987 <sup>2</sup> .....    | 36,341                                    | 586                     | 1,157                  | 4,349  | 12,749                        | 6,554                     | 5,572  | 770                    | 4,604      | 4,503              |
| 1988 .....                 | 34,317                                    | 631                     | 976                    | 4,136  | 12,733                        | 5,741                     | 5,168  | 694                    | 4,238      | 4,198              |
| 1989 .....                 | 34,204                                    | 689                     | 945                    | 4,159  | 13,098                        | 5,233                     | 5,230  | 703                    | 4,147      | 4,221              |
| 1990 .....                 | 35,674                                    | 834                     | 1,042                  | 4,506  | 13,288                        | 5,249                     | 5,418  | 810                    | 4,527      | 4,277              |
| 1991 .....                 | 36,510                                    | 722                     | 1,067                  | 4,987  | 13,572                        | 5,765                     | 5,474  | 857                    | 4,066      | 4,614              |
| 1992 .....                 | 37,040                                    | 645                     | 1,154                  | 5,792  | 13,597                        | 5,964                     | 5,642  | 976                    | 3,270      | 4,815              |
| 1993 .....                 | 36,561                                    | 612                     | 1,142                  | 5,791  | 13,059                        | 6,274                     | 5,493  | 889                    | 3,301      | 5,298              |
| 1994 .....                 | 35,015                                    | 635                     | 1,170                  | 5,859  | 11,925                        | 6,284                     | 5,280  | 854                    | 3,008      | 5,562              |
| 1995 .....                 | 33,053                                    | 575                     | 1,132                  | 5,555  | 11,023                        | 6,229                     | 4,702  | 797                    | 3,040      | 5,767              |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 10. Female part-time graduate students in science, engineering, and health fields in all institutions,  
by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------|--------------------|------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology | Social<br>sciences |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1977 .....                 | 25,873                                    | 24,430                  | 827                    | 496  | 1,837                         | 800                       | 299  | 4,174                  | 6,345      | 9,652              |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1979 .....                 | 32,218                                    | 29,772                  | 1,002                  | 666  | 1,852                         | 1,273                     | 458  | 4,365                  | 7,771      | 12,385             |                  |
| 1980 .....                 | 33,070                                    | 30,585                  | 893                    | 724  | 1,758                         | 1,684                     | 468  | 4,415                  | 7,691      | 12,952             |                  |
| 1981 .....                 | 35,922                                    | 32,789                  | 1,008                  | 845  | 1,941                         | 2,482                     | 394  | 4,559                  | 8,203      | 13,357             |                  |
| 1982 .....                 | 38,060                                    | 34,532                  | 1,022                  | 936  | 2,287                         | 3,135                     | 541  | 4,629                  | 8,653      | 13,329             |                  |
| 1983 .....                 | 38,603                                    | 34,415                  | 1,044                  | 928  | 2,282                         | 3,975                     | 611  | 4,572                  | 9,057      | 11,946             |                  |
| 1984 <sup>2</sup> .....    | 38,933                                    | 34,683                  | 1,061                  | 1,015  | 2,187                         | 4,130                     | 558  | 4,415                  | 9,496      | 11,821             |                  |
| 1985 <sup>2</sup> .....    | 40,845                                    | 36,046                  | 1,079                  | 1,093  | 2,152                         | 4,506                     | 594  | 4,701                  | 10,021     | 11,900             |                  |
| 1986 <sup>2</sup> .....    | 41,463                                    | 36,068                  | 1,122                  | 1,034  | 2,075                         | 4,535                     | 567  | 4,654                  | 9,872      | 12,209             |                  |
| 1987 <sup>2</sup> .....    | 42,127                                    | 36,447                  | 1,086                  | 1,103  | 2,034                         | 4,684                     | 574  | 4,297                  | 10,095     | 12,574             |                  |
| 1988 .....                 | 42,957                                    | 37,452                  | 1,131                  | 1,057  | 2,058                         | 4,856                     | 615  | 4,456                  | 10,542     | 12,737             |                  |
| 1989 .....                 | 44,098                                    | 38,634                  | 1,141                  | 1,105  | 2,050                         | 4,737                     | 632  | 4,622                  | 10,974     | 13,373             |                  |
| 1990 .....                 | 47,037                                    | 41,063                  | 1,247                  | 1,192  | 2,155                         | 4,728                     | 689  | 4,886                  | 12,369     | 13,797             |                  |
| 1991 .....                 | 48,770                                    | 42,738                  | 1,292                  | 1,279  | 2,077                         | 4,789                     | 702  | 4,933                  | 13,486     | 14,180             |                  |
| 1992 .....                 | 51,533                                    | 44,964                  | 1,344                  | 1,460  | 2,120                         | 4,908                     | 770  | 5,316                  | 13,843     | 15,203             |                  |
| 1993 .....                 | 53,502                                    | 47,009                  | 1,479                  | 1,508  | 2,204                         | 4,878                     | 901  | 5,492                  | 14,403     | 16,144             |                  |
| 1994 .....                 | 52,853                                    | 46,376                  | 1,393                  | 1,559  | 2,119                         | 4,593                     | 962  | 5,631                  | 13,993     | 16,126             |                  |
| 1995 .....                 | 53,059                                    | 46,445                  | 1,451                  | 1,578  | 2,058                         | 4,510                     | 995  | 5,820                  | 13,496     | 16,537             |                  |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |            |                    |                  |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering |            |                    |                  |
| 1975 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1976 .....                 | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1977 .....                 | 1,443                                     | 6                       | 96                     | 287  | 328                           | 379                       | 132  | 41                     | 174        | 9,732              |                  |
| 1978 <sup>1</sup> .....    | NA  | NA                      | NA                     | NA   | NA                            | NA                        | NA   | NA                     | NA         | NA                 | NA               |
| 1979 .....                 | 2,446                                     | 13                      | 185                    | 425  | 479                           | 677                       | 211  | 75                     | 381        | 12,338             |                  |
| 1980 .....                 | 2,485                                     | 20                      | 214                    | 466  | 425                           | 690                       | 218  | 72                     | 380        | 13,497             |                  |
| 1981 .....                 | 3,133                                     | 16                      | 245                    | 448  | 565                           | 855                       | 284  | 103                    | 617        | 15,080             |                  |
| 1982 .....                 | 3,528                                     | 37                      | 229                    | 508  | 733                           | 854                       | 286  | 112                    | 769        | 16,454             |                  |
| 1983 .....                 | 4,188                                     | 43                      | 247                    | 564  | 1,105                         | 903                       | 322  | 124                    | 880        | 17,106             |                  |
| 1984 <sup>2</sup> .....    | 4,250                                     | 46                      | 240                    | 589  | 1,063                         | 984                       | 395  | 114                    | 819        | 18,239             |                  |
| 1985 <sup>2</sup> .....    | 4,799                                     | 37                      | 250                    | 655  | 1,227                         | 1,145                     | 452  | 164                    | 869        | 18,619             |                  |
| 1986 <sup>2</sup> .....    | 5,395                                     | 52                      | 251                    | 660  | 1,441                         | 1,361                     | 532  | 154                    | 944        | 19,740             |                  |
| 1987 <sup>2</sup> .....    | 5,680                                     | 57                      | 280                    | 705  | 1,549                         | 1,510                     | 564  | 160                    | 855        | 19,807             |                  |
| 1988 .....                 | 5,505                                     | 59                      | 283                    | 729  | 1,596                         | 1,357                     | 567  | 177                    | 737        | 20,649             |                  |
| 1989 .....                 | 5,464                                     | 63                      | 233                    | 786  | 1,693                         | 1,203                     | 543  | 171                    | 772        | 21,834             |                  |
| 1990 .....                 | 5,974                                     | 90                      | 250                    | 908  | 1,759                         | 1,229                     | 594  | 201                    | 943        | 23,383             |                  |
| 1991 .....                 | 6,032                                     | 73                      | 272                    | 1,083  | 1,706                         | 1,313                     | 569  | 245                    | 771        | 24,126             |                  |
| 1992 .....                 | 6,569                                     | 85                      | 297                    | 1,326  | 1,867                         | 1,480                     | 612  | 262                    | 640        | 26,115             |                  |
| 1993 .....                 | 6,493                                     | 66                      | 333                    | 1,334  | 1,878                         | 1,420                     | 589  | 225                    | 648        | 27,658             |                  |
| 1994 .....                 | 6,477                                     | 80                      | 333                    | 1,425  | 1,713                         | 1,502                     | 606  | 229                    | 589        | 28,810             |                  |
| 1995 .....                 | 6,614                                     | 75                      | 338                    | 1,415  | 1,734                         | 1,625                     | 539  | 243                    | 645        | 29,602             |                  |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 11. Graduate students in science, engineering, and health fields in all institutions,  
by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 424,671 | 434,637 | 452,250 | 471,314 | 493,826 | 504,838 | 505,259 | 501,510 |
| Total, science and engineering fields ..... | 375,287 | 382,769 | 397,159 | 412,708 | 430,797 | 436,233 | 431,758 | 423,922 |
| Sciences, total .....                       | 272,458 | 278,726 | 289,534 | 299,132 | 312,762 | 319,352 | 318,698 | 316,393 |
| Physical sciences .....                     | 32,962  | 33,616  | 34,075  | 34,710  | 35,348  | 35,318  | 34,449  | 33,470  |
| Astronomy .....                             | 731     | 789     | 810     | 829     | 869     | 880     | 973     | 912     |
| Chemistry .....                             | 18,579  | 18,828  | 19,118  | 19,407  | 19,929  | 20,131  | 19,797  | 19,645  |
| Physics .....                               | 13,308  | 13,657  | 13,813  | 14,081  | 14,122  | 13,841  | 13,162  | 12,427  |
| Physical sciences, n.e.c. ....              | 344     | 342     | 334     | 393     | 428     | 466     | 517     | 486     |
| Earth, atmospheric, & ocean sciences .....  | 13,867  | 13,643  | 13,984  | 14,480  | 15,347  | 15,805  | 16,042  | 15,802  |
| Atmospheric sciences .....                  | 940     | 912     | 929     | 968     | 1,089   | 1,112   | 1,109   | 1,072   |
| Geosciences .....                           | 8,463   | 8,052   | 7,692   | 7,567   | 7,744   | 7,785   | 7,741   | 7,602   |
| Oceanography .....                          | 2,033   | 2,207   | 2,333   | 2,386   | 2,530   | 2,611   | 2,853   | 2,703   |
| Earth, atmos., & ocean sci., n.e.c. ....    | 2,431   | 2,472   | 3,030   | 3,559   | 3,984   | 4,297   | 4,339   | 4,425   |
| Mathematical sciences .....                 | 19,077  | 19,247  | 19,774  | 19,952  | 20,355  | 20,000  | 19,579  | 18,509  |
| Mathematics & applied mathematics .....     | 16,490  | 16,723  | 17,096  | 17,206  | 17,404  | 16,945  | 16,463  | 15,400  |
| Statistics .....                            | 2,587   | 2,524   | 2,678   | 2,746   | 2,951   | 3,055   | 3,116   | 3,109   |
| Computer sciences .....                     | 32,227  | 32,482  | 34,257  | 34,610  | 36,320  | 36,298  | 34,278  | 33,509  |
| Agricultural sciences .....                 | 11,135  | 11,190  | 11,316  | 11,506  | 11,827  | 11,914  | 12,199  | 12,426  |
| Biological sciences .....                   | 47,565  | 48,852  | 49,989  | 51,778  | 54,177  | 56,452  | 58,143  | 58,753  |
| Anatomy .....                               | 1,056   | 1,078   | 1,000   | 1,051   | 1,030   | 1,027   | 1,079   | 1,056   |
| Biochemistry .....                          | 4,921   | 5,082   | 5,039   | 5,201   | 5,376   | 5,513   | 5,632   | 5,550   |
| Biology .....                               | 12,393  | 12,761  | 13,027  | 13,292  | 13,874  | 14,327  | 14,220  | 14,211  |
| Biometry/epidemiology .....                 | 1,682   | 1,722   | 1,871   | 2,032   | 2,365   | 2,658   | 2,710   | 2,812   |
| Biophysics .....                            | 592     | 655     | 642     | 697     | 751     | 780     | 794     | 855     |
| Botany .....                                | 2,912   | 2,826   | 2,733   | 2,694   | 2,689   | 2,714   | 2,748   | 2,609   |
| Cell biology .....                          | 2,078   | 2,234   | 2,555   | 2,809   | 3,093   | 3,374   | 3,768   | 3,859   |
| Ecology .....                               | 999     | 1,084   | 1,136   | 1,180   | 1,301   | 1,410   | 1,566   | 1,717   |
| Entomology/parasitology .....               | 1,240   | 1,181   | 1,173   | 1,171   | 1,193   | 1,247   | 1,263   | 1,241   |
| Genetics .....                              | 1,289   | 1,365   | 1,408   | 1,520   | 1,639   | 1,785   | 1,699   | 1,700   |
| Microbio., immunology, & virology .....     | 4,773   | 4,827   | 4,873   | 4,928   | 4,972   | 5,068   | 5,141   | 5,095   |
| Nutrition .....                             | 4,132   | 4,164   | 4,172   | 4,164   | 4,159   | 4,388   | 4,747   | 5,012   |
| Pathology .....                             | 1,333   | 1,369   | 1,354   | 1,449   | 1,456   | 1,575   | 1,707   | 1,670   |
| Pharmacology .....                          | 2,124   | 2,267   | 2,353   | 2,432   | 2,529   | 2,645   | 2,830   | 2,703   |
| Physiology .....                            | 2,220   | 2,206   | 2,236   | 2,332   | 2,317   | 2,372   | 2,378   | 2,540   |
| Zoology .....                               | 2,029   | 2,083   | 2,104   | 2,191   | 2,139   | 2,120   | 2,092   | 2,073   |
| Biosciences, n.e.c. ....                    | 1,792   | 1,948   | 2,313   | 2,635   | 3,294   | 3,449   | 3,769   | 4,050   |
| Psychology .....                            | 43,963  | 45,528  | 48,168  | 51,343  | 53,599  | 54,680  | 54,726  | 54,243  |
| Psychology, general .....                   | 15,443  | 16,822  | 18,144  | 20,954  | 22,707  | 23,263  | 23,895  | 23,915  |
| Clinical psychology .....                   | 20,548  | 19,408  | 20,108  | 19,555  | 18,819  | 18,920  | 18,179  | 17,675  |
| Psychology, n.e.c. ....                     | 7,972   | 9,298   | 9,916   | 10,834  | 12,073  | 12,497  | 12,652  | 12,653  |
| Social sciences .....                       | 71,662  | 74,168  | 77,971  | 80,753  | 85,789  | 88,885  | 89,282  | 89,681  |
| Agricultural economics .....                | 2,259   | 2,276   | 2,273   | 2,364   | 2,522   | 2,415   | 2,289   | 2,321   |
| Anthropology (cultural & social) .....      | 5,945   | 6,128   | 6,479   | 6,731   | 7,123   | 7,361   | 7,665   | 7,694   |
| Economics (except agricultural) .....       | 12,036  | 12,139  | 12,326  | 12,707  | 13,252  | 13,214  | 12,978  | 12,790  |
| Geography .....                             | 3,208   | 3,479   | 3,530   | 3,760   | 4,102   | 4,378   | 4,502   | 4,402   |
| History and philosophy of science .....     | 288     | 304     | 331     | 337     | 360     | 369     | 387     | 401     |
| Linguistics .....                           | 3,243   | 3,286   | 3,404   | 3,425   | 3,277   | 3,321   | 3,279   | 3,194   |
| Political science .....                     | 27,723  | 29,194  | 30,582  | 31,707  | 33,797  | 35,151  | 34,383  | 34,374  |
| Sociology .....                             | 7,117   | 7,405   | 7,801   | 8,393   | 9,011   | 9,425   | 9,498   | 9,575   |
| Sociology/anthropology .....                | 960     | 988     | 1,164   | 899     | 979     | 935     | 987     | 941     |
| Social sciences, n.e.c. ....                | 8,883   | 8,969   | 10,081  | 10,430  | 11,366  | 12,316  | 13,314  | 13,989  |
| Engineering, total .....                    | 102,829 | 104,043 | 107,625 | 113,576 | 118,035 | 116,881 | 113,060 | 107,529 |
| Aerospace engineering .....                 | 3,223   | 3,524   | 3,934   | 4,120   | 4,036   | 3,940   | 3,715   | 3,343   |
| Agricultural engineering .....              | 1,052   | 1,043   | 946     | 983     | 1,008   | 1,018   | 1,061   | 1,054   |
| Biomedical engineering .....                | 1,752   | 1,916   | 2,136   | 2,239   | 2,537   | 2,675   | 2,750   | 2,687   |
| Chemical engineering .....                  | 6,618   | 6,460   | 6,735   | 7,127   | 7,397   | 7,516   | 7,608   | 7,432   |
| Civil engineering .....                     | 14,811  | 14,909  | 15,542  | 17,398  | 19,572  | 19,583  | 19,925  | 19,218  |
| Electrical engineering .....                | 32,035  | 33,257  | 33,722  | 35,182  | 36,460  | 35,337  | 33,052  | 31,060  |
| Engineering science .....                   | 2,386   | 2,077   | 2,020   | 2,154   | 2,218   | 2,180   | 2,089   | 1,955   |
| Industrial eng./manufacturing eng. ....     | 11,393  | 11,094  | 11,248  | 12,676  | 13,525  | 13,596  | 13,696  | 13,182  |
| Mechanical engineering .....                | 16,151  | 16,265  | 16,879  | 17,730  | 18,637  | 18,477  | 17,761  | 16,360  |
| Metallurgical/materials eng. ....           | 4,337   | 4,594   | 4,941   | 5,160   | 5,512   | 5,363   | 5,191   | 4,920   |
| Mining engineering .....                    | 489     | 418     | 437     | 489     | 437     | 427     | 424     | 373     |
| Nuclear engineering .....                   | 1,303   | 1,323   | 1,278   | 1,282   | 1,286   | 1,306   | 1,246   | 1,154   |
| Petroleum engineering .....                 | 742     | 665     | 670     | 705     | 737     | 725     | 624     | 610     |
| Engineering, n.e.c. ....                    | 6,537   | 6,498   | 7,137   | 6,331   | 4,673   | 4,738   | 3,918   | 4,181   |

See explanatory information, if any, and SOURCE at end of table.

**Table 11. Graduate students in science, engineering, and health fields in all institutions,  
by field: 1988-95**

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| Field                                      | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Total, health fields .....                 | 49,384 | 51,868 | 55,091 | 58,606 | 63,029 | 68,605 | 73,501 | 77,588 |
| Medical fields .....                       | 10,101 | 10,232 | 10,950 | 11,707 | 12,594 | 14,184 | 15,065 | 15,795 |
| Anesthesiology .....                       | 274    | 355    | 391    | 529    | 708    | 719    | 729    | 749    |
| Cardiology .....                           | 0      | 0      | 0      | 2      | 8      | 11     | 14     | 19     |
| Oncology/cancer research .....             | 89     | 104    | 113    | 156    | 197    | 209    | 208    | 189    |
| Endocrinology .....                        | 70     | 82     | 74     | 66     | 71     | 63     | 63     | 53     |
| Gastroenterology .....                     | 0      | 0      | 1      | 0      | 0      | 1      | 0      | 0      |
| Hematology .....                           | 6      | 4      | 4      | 4      | 5      | 3      | 2      | 1      |
| Neurology .....                            | 612    | 744    | 844    | 1,003  | 1,149  | 1,311  | 1,455  | 1,554  |
| Obstetrics and gynecology .....            | 9      | 7      | 5      | 10     | 3      | 3      | 4      | 6      |
| Ophthalmology .....                        | 51     | 43     | 37     | 32     | 27     | 19     | 32     | 30     |
| Otorhinolaryngology .....                  | 6      | 9      | 4      | 3      | 0      | 1      | 2      | 0      |
| Pediatrics .....                           | 227    | 136    | 140    | 153    | 154    | 196    | 261    | 236    |
| Preventive medicine/community health ..... | 7,616  | 7,622  | 8,167  | 8,423  | 8,737  | 9,976  | 10,497 | 11,013 |
| Psychiatry .....                           | 154    | 111    | 122    | 104    | 147    | 172    | 225    | 256    |
| Pulmonary disease .....                    | 3      | 2      | 0      | 0      | 0      | 0      | 0      | 0      |
| Radiology .....                            | 208    | 192    | 196    | 233    | 252    | 287    | 320    | 314    |
| Surgery .....                              | 64     | 72     | 65     | 69     | 76     | 82     | 119    | 180    |
| Clinical medicine, n.e.c. .....            | 712    | 749    | 787    | 920    | 1,060  | 1,131  | 1,134  | 1,195  |
| Other health fields .....                  | 39,283 | 41,636 | 44,141 | 46,899 | 50,435 | 54,421 | 58,436 | 61,793 |
| Dental sciences .....                      | 1,048  | 1,004  | 956    | 1,016  | 1,121  | 1,135  | 1,199  | 1,251  |
| Nursing .....                              | 18,862 | 19,689 | 21,194 | 22,012 | 23,213 | 24,781 | 27,042 | 28,441 |
| Pharmaceutical sciences .....              | 2,613  | 2,787  | 2,889  | 2,968  | 2,804  | 2,871  | 2,901  | 2,948  |
| Speech pathology/audiology .....           | 7,479  | 7,911  | 8,354  | 8,945  | 9,791  | 10,740 | 11,473 | 12,098 |
| Veterinary sciences .....                  | 752    | 801    | 900    | 894    | 942    | 877    | 875    | 929    |
| Health related, n.e.c. .....               | 8,529  | 9,444  | 9,848  | 11,064 | 12,564 | 14,017 | 14,946 | 16,126 |

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 12. Full-time graduate students in science, engineering, and health fields in all institutions,  
by field: 1988-95**

Page 1 of 1

| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 275,204 | 282,741 | 292,854 | 307,049 | 322,753 | 329,876 | 332,453 | 330,235 |
| Total, science and engineering fields ..... | 250,667 | 256,928 | 265,423 | 277,183 | 290,654 | 294,227 | 293,324 | 288,016 |
| Sciences, total .....                       | 187,660 | 192,553 | 199,446 | 206,149 | 216,228 | 220,400 | 221,756 | 220,154 |
| Physical sciences .....                     | 28,574  | 29,207  | 29,485  | 30,117  | 30,673  | 30,611  | 30,043  | 28,892  |
| Astronomy .....                             | 705     | 762     | 790     | 810     | 840     | 848     | 953     | 871     |
| Chemistry .....                             | 16,088  | 16,278  | 16,382  | 16,731  | 16,999  | 17,204  | 17,104  | 16,750  |
| Physics .....                               | 11,638  | 12,040  | 12,191  | 12,442  | 12,689  | 12,397  | 11,766  | 11,054  |
| Physical sciences, n.e.c. ....              | 143     | 127     | 122     | 134     | 145     | 162     | 220     | 217     |
| Earth, atmospheric, & ocean sciences .....  | 10,192  | 10,021  | 10,244  | 10,373  | 10,986  | 11,367  | 11,470  | 11,290  |
| Atmospheric sciences .....                  | 829     | 810     | 828     | 859     | 959     | 980     | 993     | 959     |
| Geosciences .....                           | 6,310   | 5,983   | 5,799   | 5,688   | 5,885   | 5,970   | 5,946   | 5,810   |
| Oceanography .....                          | 1,629   | 1,799   | 1,934   | 1,991   | 2,133   | 2,177   | 2,333   | 2,228   |
| Earth, atmos., & ocean sci., n.e.c. ....    | 1,424   | 1,429   | 1,683   | 1,835   | 2,009   | 2,240   | 2,198   | 2,293   |
| Mathematical sciences .....                 | 13,512  | 13,681  | 13,865  | 14,256  | 14,679  | 14,530  | 14,226  | 13,422  |
| Computer sciences .....                     | 15,133  | 15,606  | 16,689  | 16,516  | 17,506  | 17,399  | 16,712  | 16,564  |
| Agricultural sciences .....                 | 9,122   | 9,070   | 9,100   | 9,289   | 9,452   | 9,468   | 9,492   | 9,630   |
| Biological sciences .....                   | 39,209  | 40,348  | 40,945  | 42,700  | 44,389  | 46,481  | 48,017  | 48,283  |
| Anatomy .....                               | 973     | 999     | 911     | 961     | 960     | 977     | 983     | 978     |
| Biochemistry .....                          | 4,731   | 4,810   | 4,825   | 4,954   | 5,045   | 5,174   | 5,222   | 5,203   |
| Biology .....                               | 8,726   | 9,169   | 9,149   | 9,439   | 9,678   | 10,028  | 10,086  | 9,899   |
| Biometry/epidemiology .....                 | 1,213   | 1,211   | 1,231   | 1,431   | 1,634   | 1,990   | 2,056   | 2,093   |
| Biophysics .....                            | 544     | 610     | 605     | 679     | 728     | 755     | 770     | 810     |
| Botany .....                                | 2,540   | 2,443   | 2,354   | 2,304   | 2,301   | 2,353   | 2,349   | 2,150   |
| Cell biology .....                          | 2,023   | 2,177   | 2,485   | 2,716   | 2,961   | 3,189   | 3,596   | 3,663   |
| Ecology .....                               | 830     | 873     | 884     | 919     | 997     | 1,057   | 1,203   | 1,304   |
| Entomology/parasitology .....               | 1,061   | 1,009   | 997     | 1,014   | 1,016   | 1,039   | 1,066   | 1,041   |
| Genetics .....                              | 1,187   | 1,254   | 1,297   | 1,412   | 1,526   | 1,690   | 1,602   | 1,619   |
| Microbio., immunology, & virology .....     | 4,308   | 4,329   | 4,372   | 4,408   | 4,460   | 4,607   | 4,705   | 4,696   |
| Nutrition .....                             | 2,797   | 2,784   | 2,829   | 2,878   | 2,863   | 3,045   | 3,221   | 3,431   |
| Pathology .....                             | 1,067   | 1,104   | 1,083   | 1,113   | 1,165   | 1,296   | 1,389   | 1,382   |
| Pharmacology .....                          | 1,986   | 2,135   | 2,222   | 2,304   | 2,397   | 2,500   | 2,672   | 2,534   |
| Physiology .....                            | 2,008   | 2,057   | 2,076   | 2,163   | 2,160   | 2,220   | 2,221   | 2,376   |
| Zoology .....                               | 1,714   | 1,768   | 1,677   | 1,782   | 1,789   | 1,747   | 1,717   | 1,751   |
| Biosciences, n.e.c. ....                    | 1,501   | 1,616   | 1,948   | 2,223   | 2,709   | 2,814   | 3,159   | 3,353   |
| Psychology .....                            | 28,118  | 29,348  | 30,619  | 32,258  | 34,277  | 34,894  | 35,434  | 35,762  |
| Social sciences .....                       | 43,800  | 45,272  | 48,499  | 50,640  | 54,266  | 55,650  | 56,362  | 56,311  |
| Agricultural economics .....                | 1,909   | 1,912   | 1,961   | 2,011   | 2,105   | 1,963   | 1,936   | 1,964   |
| Anthropology (cultural & social) .....      | 4,276   | 4,411   | 4,809   | 5,079   | 5,337   | 5,429   | 5,837   | 5,792   |
| Economics (except agricultural) .....       | 9,017   | 9,078   | 9,293   | 9,850   | 10,184  | 10,107  | 10,010  | 9,782   |
| Geography .....                             | 2,215   | 2,358   | 2,374   | 2,539   | 2,801   | 3,026   | 3,119   | 2,985   |
| Linguistics .....                           | 2,519   | 2,465   | 2,586   | 2,549   | 2,477   | 2,538   | 2,518   | 2,486   |
| Political science .....                     | 13,206  | 13,998  | 15,325  | 16,083  | 17,667  | 18,387  | 17,928  | 17,660  |
| Sociology .....                             | 5,115   | 5,300   | 5,714   | 5,949   | 6,469   | 6,625   | 6,720   | 6,690   |
| Sociology/anthropology .....                | 541     | 606     | 744     | 624     | 651     | 639     | 693     | 663     |
| Social sciences, other .....                | 5,002   | 5,144   | 5,693   | 5,956   | 6,575   | 6,936   | 7,601   | 8,289   |
| Engineering, total .....                    | 63,007  | 64,375  | 65,977  | 71,034  | 74,426  | 73,827  | 71,568  | 67,862  |
| Aerospace engineering .....                 | 2,533   | 2,772   | 3,010   | 3,325   | 3,306   | 3,262   | 3,000   | 2,693   |
| Agricultural engineering .....              | 888     | 861     | 799     | 823     | 840     | 835     | 879     | 872     |
| Biomedical engineering .....                | 1,450   | 1,610   | 1,798   | 1,925   | 2,167   | 2,269   | 2,292   | 2,290   |
| Chemical engineering .....                  | 5,359   | 5,282   | 5,443   | 5,788   | 5,946   | 6,041   | 6,105   | 5,962   |
| Civil engineering .....                     | 9,946   | 9,964   | 10,128  | 11,328  | 12,454  | 12,458  | 12,641  | 12,248  |
| Electrical engineering .....                | 17,706  | 18,466  | 18,675  | 19,904  | 20,996  | 20,400  | 19,414  | 18,303  |
| Engineering science .....                   | 1,418   | 1,259   | 1,252   | 1,364   | 1,415   | 1,397   | 1,347   | 1,243   |
| Industrial eng./manufacturing eng. ....     | 4,295   | 4,658   | 4,770   | 5,598   | 6,081   | 5,902   | 5,910   | 5,328   |
| Mechanical engineering .....                | 10,416  | 10,492  | 10,867  | 11,687  | 12,383  | 12,395  | 11,875  | 11,119  |
| Metallurgical/materials eng. ....           | 3,466   | 3,720   | 3,930   | 4,058   | 4,274   | 4,249   | 4,108   | 3,880   |
| Nuclear engineering .....                   | 1,105   | 1,112   | 1,080   | 1,080   | 1,084   | 1,070   | 997     | 883     |
| Engineering, other .....                    | 4,425   | 4,179   | 4,225   | 4,154   | 3,480   | 3,549   | 3,000   | 3,041   |
| Total, health fields .....                  | 24,537  | 25,813  | 27,431  | 29,866  | 32,099  | 35,649  | 39,129  | 42,219  |
| Clinical fields .....                       | 1,363   | 1,491   | 1,557   | 1,811   | 2,038   | 2,217   | 2,374   | 2,443   |
| Dental sciences .....                       | 894     | 856     | 827     | 875     | 988     | 1,005   | 1,048   | 1,096   |
| Nursing .....                               | 6,024   | 5,987   | 6,148   | 6,475   | 6,422   | 6,875   | 7,917   | 8,600   |
| Pharmaceutical sciences .....               | 1,907   | 2,045   | 2,148   | 2,198   | 2,074   | 2,133   | 2,188   | 2,152   |
| Preventive medicine/community health .....  | 4,231   | 4,219   | 4,510   | 4,419   | 4,789   | 5,334   | 5,432   | 5,945   |
| Speech pathology/audiology .....            | 5,212   | 5,602   | 5,767   | 6,499   | 7,144   | 8,109   | 8,707   | 9,067   |
| Veterinary sciences .....                   | 606     | 668     | 709     | 717     | 754     | 693     | 696     | 733     |
| Other health fields .....                   | 4,300   | 4,945   | 5,765   | 6,872   | 7,890   | 9,283   | 10,767  | 12,183  |

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 13. Part-time graduate students in science, engineering, and health fields in all institutions,  
by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 149,467 | 151,896 | 159,396 | 164,265 | 171,073 | 174,962 | 172,806 | 171,275 |
| Total, science and engineering fields ..... | 124,620 | 125,841 | 131,736 | 135,525 | 140,143 | 142,006 | 138,434 | 135,906 |
| Sciences, total .....                       | 84,798  | 86,173  | 90,088  | 92,983  | 96,534  | 98,952  | 96,942  | 96,239  |
| Physical sciences .....                     | 4,388   | 4,409   | 4,590   | 4,593   | 4,675   | 4,707   | 4,406   | 4,578   |
| Astronomy .....                             | 26      | 27      | 20      | 19      | 29      | 32      | 20      | 41      |
| Chemistry .....                             | 2,491   | 2,550   | 2,736   | 2,676   | 2,930   | 2,927   | 2,693   | 2,895   |
| Physics .....                               | 1,670   | 1,617   | 1,622   | 1,639   | 1,433   | 1,444   | 1,396   | 1,373   |
| Physical sciences, n.e.c. ....              | 201     | 215     | 212     | 259     | 283     | 304     | 297     | 269     |
| Earth, atmospheric, & ocean sciences .....  | 3,675   | 3,622   | 3,740   | 4,107   | 4,361   | 4,438   | 4,572   | 4,512   |
| Atmospheric sciences .....                  | 111     | 102     | 101     | 109     | 130     | 132     | 116     | 113     |
| Geosciences .....                           | 2,153   | 2,069   | 1,893   | 1,879   | 1,859   | 1,815   | 1,795   | 1,792   |
| Oceanography .....                          | 404     | 408     | 399     | 395     | 397     | 434     | 520     | 475     |
| Earth, atmos., & ocean sci., n.e.c. ....    | 1,007   | 1,043   | 1,347   | 1,724   | 1,975   | 2,057   | 2,141   | 2,132   |
| Mathematical sciences .....                 | 5,565   | 5,566   | 5,909   | 5,696   | 5,676   | 5,470   | 5,353   | 5,087   |
| Computer sciences .....                     | 17,094  | 16,876  | 17,568  | 18,094  | 18,814  | 18,899  | 17,566  | 16,945  |
| Agricultural sciences .....                 | 2,013   | 2,120   | 2,216   | 2,217   | 2,375   | 2,446   | 2,707   | 2,796   |
| Biological sciences .....                   | 8,356   | 8,504   | 9,044   | 9,078   | 9,788   | 9,971   | 10,126  | 10,470  |
| Anatomy .....                               | 83      | 79      | 89      | 90      | 70      | 50      | 96      | 78      |
| Biochemistry .....                          | 190     | 272     | 214     | 247     | 331     | 339     | 410     | 347     |
| Biology .....                               | 3,667   | 3,592   | 3,878   | 3,853   | 4,196   | 4,299   | 4,134   | 4,312   |
| Biometry/epidemiology .....                 | 469     | 511     | 640     | 601     | 731     | 668     | 654     | 719     |
| Biophysics .....                            | 48      | 45      | 37      | 18      | 23      | 25      | 24      | 45      |
| Botany .....                                | 372     | 383     | 379     | 390     | 388     | 361     | 399     | 459     |
| Cell biology .....                          | 55      | 57      | 70      | 93      | 132     | 185     | 172     | 196     |
| Ecology .....                               | 169     | 211     | 252     | 261     | 304     | 353     | 363     | 413     |
| Entomology/parasitology .....               | 179     | 172     | 176     | 157     | 177     | 208     | 197     | 200     |
| Genetics .....                              | 102     | 111     | 111     | 108     | 113     | 95      | 97      | 81      |
| Microbio., immunology, & virology .....     | 465     | 498     | 501     | 520     | 512     | 461     | 436     | 399     |
| Nutrition .....                             | 1,335   | 1,380   | 1,343   | 1,286   | 1,296   | 1,343   | 1,526   | 1,581   |
| Pathology .....                             | 266     | 265     | 271     | 336     | 291     | 279     | 318     | 288     |
| Pharmacology .....                          | 138     | 132     | 131     | 128     | 132     | 145     | 158     | 169     |
| Physiology .....                            | 212     | 149     | 160     | 169     | 157     | 152     | 157     | 164     |
| Zoology .....                               | 315     | 315     | 427     | 409     | 350     | 373     | 375     | 322     |
| Biosciences, n.e.c. ....                    | 291     | 332     | 365     | 412     | 585     | 635     | 610     | 697     |
| Psychology .....                            | 15,845  | 16,180  | 17,549  | 19,085  | 19,322  | 19,786  | 19,292  | 18,481  |
| Social sciences .....                       | 27,862  | 28,896  | 29,472  | 30,113  | 31,523  | 33,235  | 32,920  | 33,370  |
| Agricultural economics .....                | 350     | 364     | 312     | 353     | 417     | 452     | 353     | 357     |
| Anthropology (cultural & social) .....      | 1,669   | 1,717   | 1,670   | 1,652   | 1,786   | 1,932   | 1,828   | 1,902   |
| Economics (except agricultural) .....       | 3,019   | 3,061   | 3,033   | 2,857   | 3,068   | 3,107   | 2,968   | 3,008   |
| Geography .....                             | 993     | 1,121   | 1,156   | 1,221   | 1,301   | 1,352   | 1,383   | 1,417   |
| Linguistics .....                           | 724     | 821     | 818     | 876     | 800     | 783     | 761     | 708     |
| Political science .....                     | 14,517  | 15,196  | 15,257  | 15,624  | 16,130  | 16,764  | 16,455  | 16,714  |
| Sociology .....                             | 2,002   | 2,105   | 2,087   | 2,444   | 2,542   | 2,800   | 2,778   | 2,885   |
| Sociology/anthropology .....                | 419     | 382     | 420     | 275     | 328     | 296     | 294     | 278     |
| Social sciences, other .....                | 4,169   | 4,129   | 4,719   | 4,811   | 5,151   | 5,749   | 6,100   | 6,101   |
| Engineering, total .....                    | 39,822  | 39,668  | 41,648  | 42,542  | 43,609  | 43,054  | 41,492  | 39,667  |
| Aerospace engineering .....                 | 690     | 752     | 924     | 795     | 730     | 678     | 715     | 650     |
| Agricultural engineering .....              | 164     | 182     | 147     | 160     | 168     | 183     | 182     | 182     |
| Biomedical engineering .....                | 302     | 306     | 338     | 314     | 370     | 406     | 458     | 397     |
| Chemical engineering .....                  | 1,259   | 1,178   | 1,292   | 1,339   | 1,451   | 1,475   | 1,503   | 1,470   |
| Civil engineering .....                     | 4,865   | 4,945   | 5,414   | 6,070   | 7,118   | 7,125   | 7,284   | 6,970   |
| Electrical engineering .....                | 14,329  | 14,791  | 15,047  | 15,278  | 15,464  | 14,937  | 13,638  | 12,757  |
| Engineering science .....                   | 968     | 818     | 768     | 790     | 803     | 783     | 742     | 712     |
| Industrial eng./manufacturing eng. ....     | 7,098   | 6,436   | 6,478   | 7,078   | 7,444   | 7,694   | 7,786   | 7,854   |
| Mechanical engineering .....                | 5,735   | 5,773   | 6,012   | 6,043   | 6,254   | 6,082   | 5,886   | 5,241   |
| Metallurgical/materials eng. ....           | 871     | 874     | 1,011   | 1,102   | 1,238   | 1,114   | 1,083   | 1,040   |
| Nuclear engineering .....                   | 198     | 211     | 198     | 202     | 202     | 236     | 249     | 271     |
| Engineering, other .....                    | 3,343   | 3,402   | 4,019   | 3,371   | 2,367   | 2,341   | 1,966   | 2,123   |
| Total, health fields .....                  | 24,847  | 26,055  | 27,660  | 28,740  | 30,930  | 32,956  | 34,372  | 35,369  |
| Clinical fields .....                       | 510     | 375     | 382     | 470     | 670     | 680     | 739     | 785     |
| Dental sciences .....                       | 154     | 148     | 129     | 141     | 133     | 130     | 151     | 155     |
| Nursing .....                               | 12,838  | 13,702  | 15,046  | 15,537  | 16,791  | 17,906  | 19,125  | 19,841  |
| Pharmaceutical sciences .....               | 706     | 742     | 741     | 770     | 730     | 738     | 713     | 796     |
| Preventive medicine/community health .....  | 3,385   | 3,403   | 3,657   | 4,004   | 3,948   | 4,642   | 5,065   | 5,068   |
| Speech pathology/audiology .....            | 2,267   | 2,309   | 2,587   | 2,446   | 2,647   | 2,631   | 2,766   | 3,031   |
| Veterinary sciences .....                   | 146     | 133     | 191     | 177     | 188     | 184     | 179     | 196     |
| Other health fields .....                   | 4,841   | 5,243   | 4,927   | 5,195   | 5,823   | 6,045   | 5,634   | 5,497   |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 14. Male graduate students in science, engineering, and health fields in all institutions,  
by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 265,440 | 268,767 | 275,713 | 284,917 | 294,313 | 294,700 | 288,757 | 280,309 |
| Total, science and engineering fields ..... | 254,011 | 256,861 | 263,407 | 271,853 | 280,465 | 279,476 | 272,420 | 263,058 |
| Sciences, total .....                       | 164,306 | 166,418 | 170,454 | 173,992 | 179,663 | 180,287 | 177,414 | 173,681 |
| Physical sciences .....                     | 25,465  | 25,815  | 26,007  | 26,146  | 26,504  | 26,116  | 25,290  | 24,359  |
| Astronomy .....                             | 591     | 649     | 645     | 657     | 683     | 682     | 750     | 689     |
| Chemistry .....                             | 13,112  | 13,158  | 13,250  | 13,145  | 13,367  | 13,279  | 12,956  | 12,789  |
| Physics .....                               | 11,557  | 11,789  | 11,900  | 12,101  | 12,179  | 11,865  | 11,254  | 10,592  |
| Physical sciences, n.e.c. ....              | 205     | 219     | 212     | 243     | 275     | 290     | 330     | 289     |
| Earth, atmospheric, & ocean sciences .....  | 10,062  | 9,785   | 9,865   | 10,025  | 10,489  | 10,745  | 10,689  | 10,323  |
| Atmospheric sciences .....                  | 777     | 734     | 744     | 778     | 848     | 887     | 867     | 835     |
| Geosciences .....                           | 6,368   | 6,089   | 5,770   | 5,559   | 5,667   | 5,675   | 5,506   | 5,300   |
| Oceanography .....                          | 1,388   | 1,482   | 1,552   | 1,540   | 1,571   | 1,607   | 1,746   | 1,604   |
| Earth, atmos., & ocean sci., n.e.c. ....    | 1,529   | 1,480   | 1,799   | 2,148   | 2,403   | 2,576   | 2,570   | 2,584   |
| Mathematical sciences .....                 | 13,301  | 13,262  | 13,575  | 13,654  | 13,806  | 13,362  | 13,044  | 12,248  |
| Computer sciences .....                     | 24,033  | 24,494  | 26,058  | 26,340  | 27,853  | 27,826  | 26,126  | 25,334  |
| Agricultural sciences .....                 | 8,038   | 8,045   | 7,981   | 7,939   | 8,059   | 7,826   | 7,911   | 7,975   |
| Biological sciences .....                   | 26,304  | 26,618  | 26,947  | 27,643  | 28,702  | 29,399  | 29,988  | 29,934  |
| Anatomy .....                               | 598     | 598     | 542     | 550     | 537     | 534     | 554     | 549     |
| Biochemistry .....                          | 2,925   | 3,064   | 2,974   | 3,070   | 3,158   | 3,182   | 3,250   | 3,144   |
| Biology .....                               | 6,939   | 7,009   | 7,078   | 7,080   | 7,295   | 7,520   | 7,476   | 7,362   |
| Biometry/epidemiology .....                 | 768     | 738     | 874     | 920     | 1,037   | 1,132   | 1,124   | 1,139   |
| Biophysics .....                            | 443     | 493     | 478     | 515     | 549     | 554     | 576     | 612     |
| Botany .....                                | 1,796   | 1,743   | 1,661   | 1,627   | 1,635   | 1,620   | 1,584   | 1,464   |
| Cell biology .....                          | 1,233   | 1,290   | 1,435   | 1,528   | 1,687   | 1,802   | 2,038   | 2,084   |
| Ecology .....                               | 602     | 644     | 667     | 662     | 712     | 746     | 821     | 943     |
| Entomology/parasitology .....               | 881     | 817     | 815     | 830     | 839     | 847     | 846     | 827     |
| Genetics .....                              | 660     | 675     | 681     | 761     | 797     | 853     | 787     | 818     |
| Microbio., immunology, & virology .....     | 2,616   | 2,588   | 2,553   | 2,576   | 2,606   | 2,600   | 2,632   | 2,604   |
| Nutrition .....                             | 1,191   | 1,197   | 1,231   | 1,244   | 1,208   | 1,244   | 1,267   | 1,287   |
| Pathology .....                             | 787     | 793     | 776     | 825     | 809     | 834     | 925     | 890     |
| Pharmacology .....                          | 1,277   | 1,298   | 1,329   | 1,302   | 1,348   | 1,404   | 1,484   | 1,396   |
| Physiology .....                            | 1,357   | 1,313   | 1,303   | 1,366   | 1,366   | 1,389   | 1,392   | 1,482   |
| Zoology .....                               | 1,245   | 1,291   | 1,269   | 1,307   | 1,311   | 1,260   | 1,216   | 1,204   |
| Biosciences, n.e.c. ....                    | 986     | 1,067   | 1,281   | 1,480   | 1,808   | 1,878   | 2,016   | 2,129   |
| Psychology .....                            | 15,502  | 15,673  | 15,822  | 16,556  | 16,695  | 16,612  | 16,486  | 16,101  |
| Social sciences .....                       | 41,601  | 42,726  | 44,199  | 45,689  | 47,555  | 48,401  | 47,880  | 47,407  |
| Agricultural economics .....                | 1,713   | 1,694   | 1,674   | 1,728   | 1,810   | 1,665   | 1,541   | 1,543   |
| Anthropology (cultural & social) .....      | 2,499   | 2,548   | 2,688   | 2,778   | 2,876   | 2,969   | 3,072   | 3,138   |
| Economics (except agricultural) .....       | 8,937   | 8,897   | 8,952   | 9,148   | 9,450   | 9,358   | 9,177   | 8,888   |
| Geography .....                             | 2,153   | 2,295   | 2,326   | 2,442   | 2,671   | 2,796   | 2,904   | 2,807   |
| Linguistics .....                           | 1,296   | 1,334   | 1,398   | 1,512   | 1,281   | 1,301   | 1,213   | 1,194   |
| Political science .....                     | 16,330  | 17,024  | 17,425  | 17,971  | 18,826  | 19,367  | 18,778  | 18,395  |
| Sociology .....                             | 3,265   | 3,395   | 3,522   | 3,781   | 3,861   | 3,857   | 3,758   | 3,788   |
| Sociology/anthropology .....                | 425     | 433     | 483     | 410     | 445     | 423     | 396     | 387     |
| Social sciences, other .....                | 4,983   | 5,106   | 5,731   | 5,919   | 6,335   | 6,665   | 7,041   | 7,267   |
| Engineering, total .....                    | 89,705  | 90,443  | 92,953  | 97,861  | 100,802 | 99,189  | 95,006  | 89,377  |
| Aerospace engineering .....                 | 2,996   | 3,281   | 3,645   | 3,793   | 3,688   | 3,583   | 3,357   | 2,992   |
| Agricultural engineering .....              | 966     | 956     | 845     | 858     | 864     | 867     | 861     | 847     |
| Biomedical engineering .....                | 1,310   | 1,442   | 1,589   | 1,651   | 1,920   | 1,977   | 2,053   | 1,965   |
| Chemical engineering .....                  | 5,543   | 5,431   | 5,589   | 5,870   | 6,003   | 6,017   | 6,082   | 5,874   |
| Civil engineering .....                     | 12,517  | 12,474  | 12,853  | 14,296  | 15,918  | 15,725  | 15,714  | 14,986  |
| Electrical engineering .....                | 28,757  | 29,742  | 30,007  | 31,311  | 32,167  | 31,015  | 28,948  | 26,858  |
| Engineering science .....                   | 2,119   | 1,829   | 1,721   | 1,866   | 1,913   | 1,876   | 1,783   | 1,658   |
| Industrial eng./manufacturing eng. ....     | 9,300   | 8,984   | 9,111   | 10,321  | 10,870  | 11,003  | 10,896  | 10,387  |
| Mechanical engineering .....                | 14,749  | 14,867  | 15,437  | 16,219  | 16,939  | 16,703  | 15,938  | 14,690  |
| Metallurgical/materials eng. ....           | 3,581   | 3,784   | 4,048   | 4,173   | 4,443   | 4,336   | 4,122   | 3,861   |
| Nuclear engineering .....                   | 1,176   | 1,182   | 1,123   | 1,105   | 1,100   | 1,121   | 1,093   | 1,009   |
| Engineering, other .....                    | 6,691   | 6,471   | 6,985   | 6,398   | 4,977   | 4,966   | 4,159   | 4,250   |
| Total, health fields .....                  | 11,429  | 11,906  | 12,306  | 13,064  | 13,848  | 15,224  | 16,337  | 17,251  |
| Clinical fields .....                       | 922     | 955     | 1,017   | 1,150   | 1,289   | 1,353   | 1,373   | 1,410   |
| Dental sciences .....                       | 757     | 713     | 677     | 717     | 772     | 786     | 819     | 819     |
| Nursing .....                               | 873     | 1,036   | 1,017   | 1,128   | 1,168   | 1,285   | 1,509   | 1,699   |
| Pharmaceutical sciences .....               | 1,549   | 1,649   | 1,748   | 1,729   | 1,621   | 1,592   | 1,591   | 1,602   |
| Preventive medicine/community health .....  | 3,139   | 2,869   | 3,174   | 3,265   | 3,334   | 3,892   | 4,117   | 4,263   |
| Speech pathology/audiology .....            | 744     | 719     | 736     | 708     | 777     | 856     | 935     | 984     |
| Veterinary sciences .....                   | 452     | 470     | 512     | 528     | 536     | 470     | 467     | 490     |
| Other health fields .....                   | 2,993   | 3,495   | 3,425   | 3,839   | 4,351   | 4,990   | 5,526   | 5,984   |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 15. Female graduate students in science, engineering, and health fields in all institutions,  
by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 159,231 | 165,870 | 176,537 | 186,397 | 199,513 | 210,138 | 216,502 | 221,201 |
| Total, science and engineering fields ..... | 121,276 | 125,908 | 133,752 | 140,855 | 150,332 | 156,757 | 159,338 | 160,864 |
| Sciences, total .....                       | 108,152 | 112,308 | 119,080 | 125,140 | 133,099 | 139,065 | 141,284 | 142,712 |
| Physical sciences .....                     | 7,497   | 7,801   | 8,068   | 8,564   | 8,844   | 9,202   | 9,159   | 9,111   |
| Astronomy .....                             | 140     | 140     | 165     | 172     | 186     | 198     | 223     | 223     |
| Chemistry .....                             | 5,467   | 5,670   | 5,868   | 6,262   | 6,562   | 6,852   | 6,841   | 6,856   |
| Physics .....                               | 1,751   | 1,868   | 1,913   | 1,980   | 1,943   | 1,976   | 1,908   | 1,835   |
| Physical sciences, n.e.c. ....              | 139     | 123     | 122     | 150     | 153     | 176     | 187     | 197     |
| Earth, atmospheric, & ocean sciences .....  | 3,805   | 3,858   | 4,119   | 4,455   | 4,858   | 5,060   | 5,353   | 5,479   |
| Atmospheric sciences .....                  | 163     | 178     | 185     | 190     | 241     | 225     | 242     | 237     |
| Geosciences .....                           | 2,095   | 1,963   | 1,922   | 2,008   | 2,077   | 2,110   | 2,235   | 2,302   |
| Oceanography .....                          | 645     | 725     | 781     | 846     | 959     | 1,004   | 1,107   | 1,099   |
| Earth, atmos., & ocean sci., n.e.c. ....    | 902     | 992     | 1,231   | 1,411   | 1,581   | 1,721   | 1,769   | 1,841   |
| Mathematical sciences .....                 | 5,776   | 5,985   | 6,199   | 6,298   | 6,549   | 6,638   | 6,535   | 6,261   |
| Computer sciences .....                     | 8,194   | 7,988   | 8,199   | 8,270   | 8,467   | 8,472   | 8,152   | 8,175   |
| Agricultural sciences .....                 | 3,097   | 3,145   | 3,335   | 3,567   | 3,768   | 4,088   | 4,288   | 4,451   |
| Biological sciences .....                   | 21,261  | 22,234  | 23,042  | 24,135  | 25,475  | 27,053  | 28,155  | 28,819  |
| Anatomy .....                               | 458     | 480     | 458     | 501     | 493     | 493     | 525     | 507     |
| Biochemistry .....                          | 1,996   | 2,018   | 2,065   | 2,131   | 2,218   | 2,331   | 2,382   | 2,406   |
| Biology .....                               | 5,454   | 5,752   | 5,949   | 6,212   | 6,579   | 6,807   | 6,744   | 6,849   |
| Biometry/epidemiology .....                 | 914     | 984     | 997     | 1,112   | 1,328   | 1,526   | 1,586   | 1,673   |
| Biophysics .....                            | 149     | 162     | 164     | 182     | 202     | 226     | 218     | 243     |
| Botany .....                                | 1,116   | 1,083   | 1,072   | 1,067   | 1,054   | 1,094   | 1,164   | 1,145   |
| Cell biology .....                          | 845     | 944     | 1,120   | 1,281   | 1,406   | 1,572   | 1,730   | 1,775   |
| Ecology .....                               | 397     | 440     | 469     | 518     | 589     | 664     | 745     | 774     |
| Entomology/parasitology .....               | 359     | 364     | 358     | 341     | 354     | 400     | 417     | 414     |
| Genetics .....                              | 629     | 690     | 727     | 759     | 842     | 932     | 912     | 882     |
| Microbio., immunology, & virology .....     | 2,157   | 2,239   | 2,320   | 2,352   | 2,366   | 2,468   | 2,509   | 2,491   |
| Nutrition .....                             | 2,941   | 2,967   | 2,941   | 2,920   | 2,951   | 3,144   | 3,480   | 3,725   |
| Pathology .....                             | 546     | 576     | 578     | 624     | 647     | 741     | 782     | 780     |
| Pharmacology .....                          | 847     | 969     | 1,024   | 1,130   | 1,181   | 1,241   | 1,346   | 1,307   |
| Physiology .....                            | 863     | 893     | 933     | 966     | 951     | 983     | 986     | 1,058   |
| Zoology .....                               | 784     | 792     | 835     | 884     | 828     | 860     | 876     | 869     |
| Biosciences, n.e.c. ....                    | 806     | 881     | 1,032   | 1,155   | 1,486   | 1,571   | 1,753   | 1,921   |
| Psychology .....                            | 28,461  | 29,855  | 32,346  | 34,787  | 36,904  | 38,068  | 38,240  | 38,142  |
| Social sciences .....                       | 30,061  | 31,442  | 33,772  | 35,064  | 38,234  | 40,484  | 41,402  | 42,274  |
| Agricultural economics .....                | 546     | 582     | 599     | 636     | 712     | 750     | 748     | 778     |
| Anthropology (cultural & social) .....      | 3,446   | 3,580   | 3,791   | 3,953   | 4,247   | 4,392   | 4,593   | 4,556   |
| Economics (except agricultural) .....       | 3,099   | 3,242   | 3,374   | 3,559   | 3,802   | 3,856   | 3,801   | 3,902   |
| Geography .....                             | 1,055   | 1,184   | 1,204   | 1,318   | 1,431   | 1,582   | 1,598   | 1,595   |
| Linguistics .....                           | 1,947   | 1,952   | 2,006   | 1,913   | 1,996   | 2,020   | 2,066   | 2,000   |
| Political science .....                     | 11,393  | 12,170  | 13,157  | 13,736  | 14,971  | 15,784  | 15,605  | 15,979  |
| Sociology .....                             | 3,852   | 4,010   | 4,279   | 4,612   | 5,150   | 5,568   | 5,740   | 5,787   |
| Sociology/anthropology .....                | 535     | 555     | 681     | 489     | 534     | 512     | 591     | 554     |
| Social sciences, other .....                | 4,188   | 4,167   | 4,681   | 4,848   | 5,391   | 6,020   | 6,660   | 7,123   |
| Engineering, total .....                    | 13,124  | 13,600  | 14,672  | 15,715  | 17,233  | 17,692  | 18,054  | 18,152  |
| Aerospace engineering .....                 | 227     | 243     | 289     | 327     | 348     | 357     | 358     | 351     |
| Agricultural engineering .....              | 86      | 87      | 101     | 125     | 144     | 151     | 200     | 207     |
| Biomedical engineering .....                | 442     | 474     | 547     | 588     | 617     | 698     | 697     | 722     |
| Chemical engineering .....                  | 1,075   | 1,029   | 1,146   | 1,257   | 1,394   | 1,499   | 1,526   | 1,558   |
| Civil engineering .....                     | 2,294   | 2,435   | 2,689   | 3,102   | 3,654   | 3,858   | 4,211   | 4,232   |
| Electrical engineering .....                | 3,278   | 3,515   | 3,715   | 3,871   | 4,293   | 4,322   | 4,104   | 4,202   |
| Engineering science .....                   | 267     | 248     | 299     | 288     | 305     | 304     | 306     | 297     |
| Industrial eng./manufacturing eng. ....     | 2,093   | 2,110   | 2,137   | 2,355   | 2,655   | 2,593   | 2,800   | 2,795   |
| Mechanical engineering .....                | 1,402   | 1,398   | 1,442   | 1,511   | 1,698   | 1,774   | 1,823   | 1,670   |
| Metallurgical/materials eng. ....           | 756     | 810     | 893     | 987     | 1,069   | 1,027   | 1,069   | 1,059   |
| Nuclear engineering .....                   | 127     | 141     | 155     | 177     | 186     | 185     | 153     | 145     |
| Engineering, other .....                    | 1,077   | 1,110   | 1,259   | 1,127   | 870     | 924     | 807     | 914     |
| Total, health fields .....                  | 37,955  | 39,962  | 42,785  | 45,542  | 49,181  | 53,381  | 57,164  | 60,337  |
| Clinical fields .....                       | 951     | 911     | 922     | 1,131   | 1,419   | 1,544   | 1,740   | 1,818   |
| Dental sciences .....                       | 291     | 291     | 279     | 299     | 349     | 349     | 380     | 432     |
| Nursing .....                               | 17,989  | 18,653  | 20,177  | 20,884  | 22,045  | 23,496  | 25,533  | 26,742  |
| Pharmaceutical sciences .....               | 1,064   | 1,138   | 1,141   | 1,239   | 1,183   | 1,279   | 1,310   | 1,346   |
| Preventive medicine/community health .....  | 4,477   | 4,753   | 4,993   | 5,158   | 5,403   | 6,084   | 6,380   | 6,750   |
| Speech pathology/audiology .....            | 6,735   | 7,192   | 7,618   | 8,237   | 9,014   | 9,884   | 10,538  | 11,114  |
| Veterinary sciences .....                   | 300     | 331     | 388     | 366     | 406     | 407     | 408     | 439     |
| Other health fields .....                   | 6,148   | 6,693   | 7,267   | 8,228   | 9,362   | 10,338  | 10,875  | 11,696  |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 16. Full-time graduate students with U.S. citizenship in science, engineering, and health fields in all institutions, by field: 1975-95**

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| Year                    | Total, science and engineering | Sciences             |                   |                                      |                        |                        |                                       |                     |            |                 | Health fields |
|-------------------------|--------------------------------|----------------------|-------------------|--------------------------------------|------------------------|------------------------|---------------------------------------|---------------------|------------|-----------------|---------------|
|                         |                                | Sciences, total      | Physical sciences | Earth, atmospheric, & ocean sciences | Mathematical sciences  | Computer sciences      | Agricultural sciences                 | Biological sciences | Psychology | Social sciences |               |
| 1975 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              | NA            |
| 1976 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              | NA            |
| 1977 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              | NA            |
| 1978 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              | NA            |
| 1979 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              | NA            |
| 1980 .....              | 166,229                        | 141,493              | 17,186            | 9,484                                | 6,647                  | 4,521                  | 7,872                                 | 33,171              | 25,461     | 37,151          |               |
| 1981 .....              | 165,697                        | 139,653              | 17,049            | 9,439                                | 6,511                  | 4,887                  | 7,873                                 | 32,490              | 25,566     | 35,838          |               |
| 1982 .....              | 166,772                        | 138,299              | 17,584            | 9,693                                | 6,926                  | 5,981                  | 7,676                                 | 31,720              | 24,588     | 34,131          |               |
| 1983 .....              | 169,959                        | 138,804              | 18,009            | 10,299                               | 6,714                  | 6,677                  | 7,446                                 | 31,283              | 25,468     | 32,908          |               |
| 1984 <sup>2</sup> ..... | 169,948                        | 138,001              | 18,292            | 10,164                               | 6,772                  | 6,982                  | 7,420                                 | 31,374              | 24,924     | 32,073          |               |
| 1985 <sup>2</sup> ..... | 168,339                        | 136,515              | 18,186            | 9,669                                | 6,995                  | 8,327                  | 6,854                                 | 30,715              | 24,179     | 31,590          |               |
| 1986 <sup>2</sup> ..... | 170,462                        | 137,232              | 18,264            | 9,382                                | 7,243                  | 8,912                  | 6,743                                 | 30,664              | 25,085     | 30,939          |               |
| 1987 <sup>2</sup> ..... | 171,183                        | 137,260              | 18,384            | 8,496                                | 7,549                  | 8,863                  | 6,434                                 | 30,255              | 26,044     | 31,235          |               |
| 1988 .....              | 170,246                        | 136,735              | 18,130            | 8,040                                | 7,738                  | 8,415                  | 6,443                                 | 30,244              | 26,802     | 30,923          |               |
| 1989 .....              | 173,439                        | 139,370              | 18,107            | 7,717                                | 7,697                  | 8,616                  | 6,393                                 | 30,367              | 28,021     | 32,452          |               |
| 1990 .....              | 177,825                        | 143,361              | 17,836            | 7,813                                | 7,961                  | 8,742                  | 6,215                                 | 30,286              | 29,134     | 35,374          |               |
| 1991 .....              | 185,496                        | 148,405              | 18,267            | 7,802                                | 8,380                  | 8,426                  | 6,405                                 | 31,102              | 30,634     | 37,389          |               |
| 1992 .....              | 197,569                        | 157,671              | 18,759            | 8,309                                | 8,939                  | 8,852                  | 6,590                                 | 32,558              | 32,635     | 41,029          |               |
| 1993 .....              | 204,630                        | 163,377              | 19,231            | 8,680                                | 9,056                  | 8,993                  | 6,661                                 | 34,520              | 33,280     | 42,956          |               |
| 1994 .....              | 206,916                        | 165,770              | 19,132            | 8,608                                | 8,856                  | 8,766                  | 6,680                                 | 36,188              | 33,556     | 43,984          |               |
| 1995 .....              | 204,742                        | 166,058              | 18,417            | 8,705                                | 8,293                  | 8,711                  | 6,857                                 | 37,097              | 34,084     | 43,894          |               |
| <b>Engineering</b>      |                                |                      |                   |                                      |                        |                        |                                       |                     |            |                 |               |
| Engineering, total      | Aerospace engineering          | Chemical engineering | Civil engineering | Electrical engineering               | Industrial engineering | Mechanical engineering | Metallurgical & materials engineering | Other engineering   |            | Health fields   |               |
| 1975 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              |               |
| 1976 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              |               |
| 1977 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              |               |
| 1978 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              |               |
| 1979 <sup>1</sup> ..... | NA                             | NA                   | NA                | NA                                   | NA                     | NA                     | NA                                    | NA                  | NA         | NA              |               |
| 1980 .....              | 24,736                         | 759                  | 2,500             | 4,670                                | 5,666                  | 2,297                  | 3,211                                 | 1,147               | 4,486      | 21,950          |               |
| 1981 .....              | 26,044                         | 882                  | 2,787             | 5,162                                | 5,665                  | 2,029                  | 3,363                                 | 1,342               | 4,814      | 21,938          |               |
| 1982 .....              | 28,473                         | 945                  | 3,267             | 5,428                                | 6,421                  | 2,190                  | 3,767                                 | 1,297               | 5,158      | 20,586          |               |
| 1983 .....              | 31,155                         | 1,088                | 3,630             | 5,544                                | 7,398                  | 1,933                  | 4,327                                 | 1,530               | 5,705      | 20,201          |               |
| 1984 <sup>2</sup> ..... | 31,947                         | 1,115                | 3,603             | 5,687                                | 7,890                  | 1,934                  | 4,591                                 | 1,663               | 5,464      | 20,561          |               |
| 1985 <sup>2</sup> ..... | 31,824                         | 1,258                | 3,337             | 5,282                                | 8,137                  | 1,874                  | 4,858                                 | 1,805               | 5,273      | 20,762          |               |
| 1986 <sup>2</sup> ..... | 33,230                         | 1,343                | 3,412             | 5,303                                | 8,572                  | 2,053                  | 5,218                                 | 1,854               | 5,475      | 20,665          |               |
| 1987 <sup>2</sup> ..... | 33,923                         | 1,559                | 3,353             | 5,090                                | 9,002                  | 2,145                  | 5,559                                 | 1,829               | 5,386      | 21,103          |               |
| 1988 .....              | 33,511                         | 1,502                | 2,957             | 5,208                                | 9,295                  | 2,227                  | 5,299                                 | 1,805               | 5,218      | 21,485          |               |
| 1989 .....              | 34,069                         | 1,757                | 2,668             | 5,097                                | 9,723                  | 2,426                  | 5,632                                 | 1,890               | 4,876      | 22,527          |               |
| 1990 .....              | 34,464                         | 1,870                | 2,668             | 5,375                                | 9,652                  | 2,374                  | 5,781                                 | 1,985               | 4,759      | 23,875          |               |
| 1991 .....              | 37,091                         | 2,201                | 2,798             | 6,140                                | 9,976                  | 2,760                  | 6,120                                 | 2,067               | 5,029      | 26,105          |               |
| 1992 .....              | 39,898                         | 2,246                | 2,948             | 7,003                                | 10,577                 | 3,076                  | 6,803                                 | 2,247               | 4,998      | 28,406          |               |
| 1993 .....              | 41,253                         | 2,178                | 3,107             | 7,440                                | 10,458                 | 3,209                  | 7,228                                 | 2,264               | 5,369      | 31,832          |               |
| 1994 .....              | 41,146                         | 1,862                | 3,364             | 7,850                                | 10,467                 | 3,180                  | 7,073                                 | 2,335               | 5,015      | 35,490          |               |
| 1995 .....              | 38,684                         | 1,611                | 3,312             | 7,693                                | 9,446                  | 2,849                  | 6,558                                 | 2,152               | 5,063      | 38,518          |               |

<sup>1</sup> Distribution by citizenship data were not requested before 1980.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** NA = Not available

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 17. Full-time graduate students without U.S. citizenship in science, engineering, and health fields  
in all institutions, by field: 1975-95**

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| Year                    | Total,<br>science<br>and engi-<br>neering | Sciences                     |                           |  |                                |                                |   |                           |                  |                    |
|-------------------------|---|------------------------------|---------------------------|--|--------------------------------|--------------------------------|---|---------------------------|------------------|--------------------|
|                         |   | Sciences,<br>total           | Physical<br>sciences      | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Mathem-<br>atical<br>sciences  | Computer<br>sciences           | Agricul-<br>tural<br>sciences                         | Biological<br>sciences    | Psychology       | Social<br>sciences |
| 1975 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1976 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1977 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1978 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1979 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1980 .....              | 48,280                                    | 30,389                       | 5,731                     | 1,387  | 3,254                          | 2,066                          | 2,296   | 4,519                     | 1,210            | 9,926              |
| 1981 .....              | 52,348                                    | 32,667                       | 6,258                     | 1,495  | 3,641                          | 2,558                          | 2,439   | 4,787                     | 1,004            | 10,485             |
| 1982 .....              | 55,183                                    | 33,901                       | 6,454                     | 1,626  | 3,887                          | 3,190                          | 2,460   | 4,968                     | 1,079            | 10,237             |
| 1983 .....              | 59,534                                    | 36,781                       | 7,195                     | 1,669  | 4,241                          | 3,923                          | 2,530   | 5,457                     | 1,093            | 10,673             |
| 1984 <sup>2</sup> ..... | 61,104                                    | 37,884                       | 7,560                     | 1,570  | 4,537                          | 4,454                          | 2,488   | 5,740                     | 1,045            | 10,490             |
| 1985 <sup>2</sup> ..... | 65,717                                    | 41,645                       | 8,483                     | 1,665  | 4,821                          | 5,534                          | 2,396   | 6,286                     | 1,156            | 11,304             |
| 1986 <sup>2</sup> ..... | 72,379                                    | 45,443                       | 9,498                     | 1,867  | 5,145                          | 6,108                          | 2,598   | 7,146                     | 1,170            | 11,911             |
| 1987 <sup>2</sup> ..... | 76,036                                    | 48,027                       | 10,028                    | 1,939  | 5,494                          | 6,473                          | 2,660   | 7,980                     | 1,212            | 12,241             |
| 1988 .....              | 80,421                                    | 50,925                       | 10,444                    | 2,152  | 5,774                          | 6,718                          | 2,679   | 8,965                     | 1,316            | 12,877             |
| 1989 .....              | 83,489                                    | 53,183                       | 11,100                    | 2,304  | 5,984                          | 6,990                          | 2,677   | 9,981                     | 1,327            | 12,820             |
| 1990 .....              | 87,598                                    | 56,085                       | 11,649                    | 2,431  | 5,904                          | 7,947                          | 2,885   | 10,659                    | 1,485            | 13,125             |
| 1991 .....              | 91,687                                    | 57,744                       | 11,850                    | 2,571  | 5,876                          | 8,090                          | 2,884   | 11,598                    | 1,624            | 13,251             |
| 1992 .....              | 93,085                                    | 58,557                       | 11,914                    | 2,677  | 5,740                          | 8,654                          | 2,862   | 11,831                    | 1,642            | 13,237             |
| 1993 .....              | 89,597                                    | 57,023                       | 11,380                    | 2,687  | 5,474                          | 8,406                          | 2,807   | 11,961                    | 1,614            | 12,694             |
| 1994 .....              | 86,408                                    | 55,986                       | 10,911                    | 2,862  | 5,370                          | 7,946                          | 2,812   | 11,829                    | 1,878            | 12,378             |
| 1995 .....              | 83,274                                    | 54,096                       | 10,475                    | 2,585  | 5,129                          | 7,853                          | 2,773   | 11,186                    | 1,678            | 12,417             |
| Engineering             |   |                              |                           |  |                                |                                |   |                           |                  |                    |
| Engineering,<br>total   | Aerospace<br>engi-<br>neering             | Chemical<br>engi-<br>neering | Civil<br>engi-<br>neering | Electrical<br>engi-<br>neering                     | Industrial<br>engi-<br>neering | Mechanical<br>engi-<br>neering | Metallur-<br>gical &<br>materials<br>engi-<br>neering | Other<br>engi-<br>neering | Health<br>fields |                    |
| 1975 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1976 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1977 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1978 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1979 <sup>1</sup> ..... | NA  | NA                           | NA                        | NA   | NA                             | NA                             | NA  | NA                        | NA               | NA                 |
| 1980 .....              | 17,891                                    | 568                          | 1,990                     | 3,288  | 4,297                          | 1,439                          | 2,630   | 1,107                     | 2,572            | 2,033              |
| 1981 .....              | 19,681                                    | 601                          | 2,202                     | 3,637  | 4,785                          | 1,574                          | 3,059   | 1,112                     | 2,711            | 2,135              |
| 1982 .....              | 21,282                                    | 577                          | 2,341                     | 3,953  | 5,112                          | 1,617                          | 3,500   | 1,181                     | 3,001            | 2,289              |
| 1983 .....              | 22,753                                    | 752                          | 2,239                     | 4,260  | 5,867                          | 1,355                          | 4,003   | 1,174                     | 3,103            | 2,398              |
| 1984 <sup>2</sup> ..... | 23,220                                    | 739                          | 2,131                     | 4,399  | 6,035                          | 1,459                          | 4,107   | 1,209                     | 3,141            | 2,346              |
| 1985 <sup>2</sup> ..... | 24,072                                    | 736                          | 2,209                     | 4,467  | 6,662                          | 1,582                          | 4,017   | 1,288                     | 3,111            | 2,533              |
| 1986 <sup>2</sup> ..... | 26,936                                    | 811                          | 2,182                     | 4,668  | 7,718                          | 1,754                          | 4,571   | 1,516                     | 3,716            | 2,691              |
| 1987 <sup>2</sup> ..... | 28,009                                    | 813                          | 2,321                     | 4,538  | 8,099                          | 2,011                          | 4,671   | 1,607                     | 3,949            | 2,758              |
| 1988 .....              | 29,496                                    | 1,031                        | 2,402                     | 4,738  | 8,411                          | 2,068                          | 5,117   | 1,661                     | 4,068            | 3,052              |
| 1989 .....              | 30,306                                    | 1,015                        | 2,614                     | 4,867  | 8,743                          | 2,232                          | 4,860   | 1,830                     | 4,145            | 3,286              |
| 1990 .....              | 31,513                                    | 1,140                        | 2,775                     | 4,753  | 9,023                          | 2,396                          | 5,086   | 1,945                     | 4,395            | 3,556              |
| 1991 .....              | 33,943                                    | 1,124                        | 2,990                     | 5,188  | 9,928                          | 2,838                          | 5,567   | 1,991                     | 4,317            | 3,761              |
| 1992 .....              | 34,528                                    | 1,060                        | 2,998                     | 5,451  | 10,419                         | 3,005                          | 5,580   | 2,027                     | 3,988            | 3,693              |
| 1993 .....              | 32,574                                    | 1,084                        | 2,934                     | 5,018  | 9,942                          | 2,693                          | 5,167   | 1,985                     | 3,751            | 3,817              |
| 1994 .....              | 30,422                                    | 1,138                        | 2,741                     | 4,791  | 8,947                          | 2,730                          | 4,802   | 1,773                     | 3,500            | 3,639              |
| 1995 .....              | 29,178                                    | 1,082                        | 2,650                     | 4,555  | 8,857                          | 2,479                          | 4,561   | 1,728                     | 3,266            | 3,701              |

<sup>1</sup> Distribution by citizenship data were not requested before 1980.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

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**Table 18. Full-time graduate science, engineering, and health students with U.S. citizenship  
in all institutions, by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 191,731 | 195,966 | 201,700 | 211,601 | 225,975 | 236,462 | 242,406 | 243,260 |
| Total, science and engineering fields ..... | 170,246 | 173,439 | 177,825 | 185,496 | 197,569 | 204,630 | 206,916 | 204,742 |
| Sciences, total .....                       | 136,735 | 139,370 | 143,361 | 148,405 | 157,671 | 163,377 | 165,770 | 166,058 |
| Physical sciences .....                     | 18,130  | 18,107  | 17,836  | 18,267  | 18,759  | 19,231  | 19,132  | 18,417  |
| Astronomy .....                             | 545     | 604     | 603     | 598     | 621     | 638     | 694     | 646     |
| Chemistry .....                             | 10,764  | 10,548  | 10,242  | 10,393  | 10,735  | 11,129  | 11,189  | 10,960  |
| Physics .....                               | 6,714   | 6,854   | 6,897   | 7,173   | 7,294   | 7,356   | 7,096   | 6,652   |
| Physical sciences, n.e.c. ....              | 107     | 101     | 94      | 103     | 109     | 108     | 153     | 159     |
| Earth, atmospheric, & ocean sciences .....  | 8,040   | 7,717   | 7,813   | 7,802   | 8,309   | 8,680   | 8,608   | 8,705   |
| Atmospheric sciences .....                  | 598     | 575     | 564     | 570     | 652     | 708     | 743     | 711     |
| Geosciences .....                           | 5,115   | 4,704   | 4,438   | 4,282   | 4,365   | 4,450   | 4,387   | 4,420   |
| Oceanography .....                          | 1,192   | 1,277   | 1,402   | 1,427   | 1,570   | 1,620   | 1,662   | 1,645   |
| Earth, atmos., & ocean sci., n.e.c. ....    | 1,135   | 1,161   | 1,409   | 1,523   | 1,722   | 1,902   | 1,816   | 1,929   |
| Mathematical sciences .....                 | 7,738   | 7,697   | 7,961   | 8,380   | 8,939   | 9,056   | 8,856   | 8,293   |
| Computer sciences .....                     | 8,415   | 8,616   | 8,742   | 8,426   | 8,852   | 8,993   | 8,766   | 8,711   |
| Agricultural sciences .....                 | 6,443   | 6,393   | 6,215   | 6,405   | 6,590   | 6,661   | 6,680   | 6,857   |
| Biological sciences .....                   | 30,244  | 30,367  | 30,286  | 31,102  | 32,558  | 34,520  | 36,188  | 37,097  |
| Anatomy .....                               | 793     | 784     | 709     | 720     | 723     | 738     | 761     | 738     |
| Biochemistry .....                          | 3,401   | 3,301   | 3,200   | 3,237   | 3,324   | 3,432   | 3,493   | 3,603   |
| Biology .....                               | 7,218   | 7,469   | 7,370   | 7,575   | 7,787   | 8,199   | 8,354   | 8,219   |
| Biometry/epidemiology .....                 | 912     | 907     | 889     | 983     | 1,147   | 1,448   | 1,523   | 1,590   |
| Biophysics .....                            | 365     | 402     | 407     | 433     | 479     | 541     | 562     | 606     |
| Botany .....                                | 1,702   | 1,625   | 1,522   | 1,455   | 1,494   | 1,536   | 1,610   | 1,509   |
| Cell biology .....                          | 1,618   | 1,700   | 1,950   | 2,097   | 2,269   | 2,462   | 2,748   | 2,873   |
| Ecology .....                               | 708     | 740     | 733     | 769     | 864     | 892     | 1,042   | 1,150   |
| Entomology/parasitology .....               | 775     | 718     | 699     | 679     | 712     | 718     | 743     | 709     |
| Genetics .....                              | 923     | 954     | 1,004   | 1,104   | 1,182   | 1,323   | 1,254   | 1,279   |
| Microbio., immunology, & virology .....     | 3,356   | 3,259   | 3,222   | 3,215   | 3,319   | 3,378   | 3,459   | 3,564   |
| Nutrition .....                             | 1,855   | 1,813   | 1,783   | 1,761   | 1,787   | 1,848   | 2,122   | 2,313   |
| Pathology .....                             | 825     | 825     | 801     | 798     | 843     | 957     | 1,054   | 1,060   |
| Pharmacology .....                          | 1,544   | 1,626   | 1,652   | 1,672   | 1,717   | 1,888   | 2,045   | 1,982   |
| Physiology .....                            | 1,561   | 1,507   | 1,495   | 1,525   | 1,528   | 1,623   | 1,647   | 1,867   |
| Zoology .....                               | 1,453   | 1,499   | 1,385   | 1,468   | 1,494   | 1,486   | 1,445   | 1,523   |
| Biosciences, n.e.c. ....                    | 1,235   | 1,238   | 1,465   | 1,611   | 1,889   | 2,051   | 2,326   | 2,512   |
| Psychology .....                            | 26,802  | 28,021  | 29,134  | 30,634  | 32,635  | 33,280  | 33,556  | 34,084  |
| Social sciences .....                       | 30,923  | 32,452  | 35,374  | 37,389  | 41,029  | 42,956  | 43,984  | 43,894  |
| Agricultural economics .....                | 1,037   | 996     | 1,031   | 1,057   | 1,110   | 1,071   | 1,104   | 1,062   |
| Anthropology (cultural & social) .....      | 3,625   | 3,756   | 4,112   | 4,363   | 4,620   | 4,754   | 5,156   | 5,203   |
| Economics (except agricultural) .....       | 4,540   | 4,583   | 4,658   | 5,071   | 5,339   | 5,413   | 5,330   | 5,010   |
| Geography .....                             | 1,808   | 1,932   | 1,942   | 2,129   | 2,375   | 2,594   | 2,721   | 2,587   |
| Linguistics .....                           | 1,525   | 1,453   | 1,518   | 1,497   | 1,525   | 1,630   | 1,620   | 1,612   |
| Political science .....                     | 10,260  | 11,271  | 12,572  | 13,266  | 14,864  | 15,617  | 15,285  | 14,980  |
| Sociology .....                             | 3,681   | 3,910   | 4,322   | 4,638   | 5,170   | 5,473   | 5,655   | 5,741   |
| Sociology/anthropology .....                | 428     | 485     | 610     | 514     | 553     | 567     | 616     | 586     |
| Social sciences, other .....                | 4,019   | 4,066   | 4,609   | 4,854   | 5,473   | 5,837   | 6,497   | 7,113   |
| Engineering, total .....                    | 33,511  | 34,069  | 34,464  | 37,091  | 39,898  | 41,253  | 41,146  | 38,684  |
| Aerospace engineering .....                 | 1,502   | 1,757   | 1,870   | 2,201   | 2,246   | 2,178   | 1,862   | 1,611   |
| Agricultural engineering .....              | 406     | 362     | 330     | 330     | 377     | 403     | 438     | 425     |
| Biomedical engineering .....                | 1,028   | 1,042   | 1,210   | 1,263   | 1,444   | 1,570   | 1,562   | 1,628   |
| Chemical engineering .....                  | 2,957   | 2,668   | 2,668   | 2,798   | 2,948   | 3,107   | 3,364   | 3,312   |
| Civil engineering .....                     | 5,208   | 5,097   | 5,375   | 6,140   | 7,003   | 7,440   | 7,850   | 7,693   |
| Electrical engineering .....                | 9,295   | 9,723   | 9,652   | 9,976   | 10,577  | 10,458  | 10,467  | 9,446   |
| Engineering science .....                   | 803     | 702     | 745     | 774     | 802     | 824     | 833     | 825     |
| Industrial eng./manufacturing eng. ....     | 2,227   | 2,426   | 2,374   | 2,760   | 3,076   | 3,209   | 3,180   | 2,849   |
| Mechanical engineering .....                | 5,299   | 5,632   | 5,781   | 6,120   | 6,803   | 7,228   | 7,073   | 6,558   |
| Metallurgical/materials eng. ....           | 1,805   | 1,890   | 1,985   | 2,067   | 2,247   | 2,264   | 2,335   | 2,152   |
| Nuclear engineering .....                   | 644     | 628     | 577     | 590     | 611     | 634     | 618     | 532     |
| Engineering, other .....                    | 2,337   | 2,142   | 1,897   | 2,072   | 1,764   | 1,938   | 1,564   | 1,653   |
| Total, health fields .....                  | 21,485  | 22,527  | 23,875  | 26,105  | 28,406  | 31,832  | 35,490  | 38,518  |
| Clinical fields .....                       | 1,145   | 1,233   | 1,261   | 1,480   | 1,656   | 1,825   | 2,005   | 2,106   |
| Dental sciences .....                       | 742     | 689     | 643     | 652     | 760     | 769     | 838     | 863     |
| Nursing .....                               | 5,841   | 5,817   | 5,949   | 6,223   | 6,207   | 6,630   | 7,634   | 8,303   |
| Pharmaceutical sciences .....               | 1,093   | 1,141   | 1,189   | 1,214   | 1,100   | 1,179   | 1,317   | 1,195   |
| Preventive medicine/community health .....  | 3,357   | 3,340   | 3,533   | 3,457   | 3,948   | 4,465   | 4,704   | 5,222   |
| Speech pathology/audiology .....            | 4,948   | 5,326   | 5,478   | 6,184   | 6,817   | 7,770   | 8,372   | 8,796   |
| Veterinary sciences .....                   | 445     | 479     | 508     | 494     | 522     | 470     | 485     | 503     |
| Other health fields .....                   | 3,914   | 4,502   | 5,314   | 6,401   | 7,396   | 8,724   | 10,135  | 11,530  |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 19. Full-time graduate science, engineering, and health students without U.S. citizenship  
in all institutions, by field: 1988-95**

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| Field                                       | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Total, all surveyed fields .....            | 83,473 | 86,775 | 91,154 | 95,448 | 96,778 | 93,414 | 90,047 | 86,975 |
| Total, science and engineering fields ..... | 80,421 | 83,489 | 87,598 | 91,687 | 93,085 | 89,597 | 86,408 | 83,274 |
| Sciences, total .....                       | 50,925 | 53,183 | 56,085 | 57,744 | 58,557 | 57,023 | 55,986 | 54,096 |
| Physical sciences .....                     | 10,444 | 11,100 | 11,649 | 11,850 | 11,914 | 11,380 | 10,911 | 10,475 |
| Astronomy .....                             | 160    | 158    | 187    | 212    | 219    | 210    | 259    | 225    |
| Chemistry .....                             | 5,324  | 5,730  | 6,140  | 6,338  | 6,264  | 6,075  | 5,915  | 5,790  |
| Physics .....                               | 4,924  | 5,186  | 5,294  | 5,269  | 5,395  | 5,041  | 4,670  | 4,402  |
| Physical sciences, n.e.c. ....              | 36     | 26     | 28     | 31     | 36     | 54     | 67     | 58     |
| Earth, atmospheric, & ocean sciences .....  | 2,152  | 2,304  | 2,431  | 2,571  | 2,677  | 2,687  | 2,862  | 2,585  |
| Atmospheric sciences .....                  | 231    | 235    | 264    | 289    | 307    | 272    | 250    | 248    |
| Geosciences .....                           | 1,195  | 1,279  | 1,361  | 1,406  | 1,520  | 1,520  | 1,559  | 1,390  |
| Oceanography .....                          | 437    | 522    | 532    | 564    | 563    | 557    | 671    | 583    |
| Earth, atmos., & ocean sci., n.e.c. ....    | 289    | 268    | 274    | 312    | 287    | 338    | 382    | 364    |
| Mathematical sciences .....                 | 5,774  | 5,984  | 5,904  | 5,876  | 5,740  | 5,474  | 5,370  | 5,129  |
| Computer sciences .....                     | 6,718  | 6,990  | 7,947  | 8,090  | 8,654  | 8,406  | 7,946  | 7,853  |
| Agricultural sciences .....                 | 2,679  | 2,677  | 2,885  | 2,884  | 2,862  | 2,807  | 2,812  | 2,773  |
| Biological sciences .....                   | 8,965  | 9,981  | 10,659 | 11,598 | 11,831 | 11,961 | 11,829 | 11,186 |
| Anatomy .....                               | 180    | 215    | 202    | 241    | 237    | 239    | 222    | 240    |
| Biochemistry .....                          | 1,330  | 1,509  | 1,625  | 1,717  | 1,721  | 1,742  | 1,729  | 1,600  |
| Biology .....                               | 1,508  | 1,700  | 1,779  | 1,864  | 1,891  | 1,829  | 1,732  | 1,680  |
| Biometry/epidemiology .....                 | 301    | 304    | 342    | 448    | 487    | 542    | 533    | 503    |
| Biophysics .....                            | 179    | 208    | 198    | 246    | 249    | 214    | 208    | 204    |
| Botany .....                                | 838    | 818    | 832    | 849    | 807    | 817    | 739    | 641    |
| Cell biology .....                          | 405    | 477    | 535    | 619    | 692    | 727    | 848    | 790    |
| Ecology .....                               | 122    | 133    | 151    | 150    | 133    | 165    | 161    | 154    |
| Entomology/parasitology .....               | 286    | 291    | 298    | 335    | 304    | 321    | 323    | 332    |
| Genetics .....                              | 264    | 300    | 293    | 308    | 344    | 367    | 348    | 340    |
| Microbio., immunology, & virology .....     | 952    | 1,070  | 1,150  | 1,193  | 1,141  | 1,229  | 1,246  | 1,132  |
| Nutrition .....                             | 942    | 971    | 1,046  | 1,117  | 1,076  | 1,197  | 1,099  | 1,118  |
| Pathology .....                             | 242    | 279    | 282    | 315    | 322    | 339    | 335    | 322    |
| Pharmacology .....                          | 442    | 509    | 570    | 632    | 680    | 612    | 627    | 552    |
| Physiology .....                            | 447    | 550    | 581    | 638    | 632    | 597    | 574    | 509    |
| Zoology .....                               | 261    | 269    | 292    | 314    | 295    | 261    | 272    | 228    |
| Biosciences, n.e.c. ....                    | 266    | 378    | 483    | 612    | 820    | 763    | 833    | 841    |
| Psychology .....                            | 1,316  | 1,327  | 1,485  | 1,624  | 1,642  | 1,614  | 1,878  | 1,678  |
| Social sciences .....                       | 12,877 | 12,820 | 13,125 | 13,251 | 13,237 | 12,694 | 12,378 | 12,417 |
| Agricultural economics .....                | 872    | 916    | 930    | 954    | 995    | 892    | 832    | 902    |
| Anthropology (cultural & social) .....      | 651    | 655    | 697    | 716    | 717    | 675    | 681    | 589    |
| Economics (except agricultural) .....       | 4,477  | 4,495  | 4,635  | 4,779  | 4,845  | 4,694  | 4,680  | 4,772  |
| Geography .....                             | 407    | 426    | 432    | 410    | 426    | 432    | 398    | 398    |
| Linguistics .....                           | 994    | 1,012  | 1,068  | 1,052  | 952    | 908    | 898    | 874    |
| Political science .....                     | 2,946  | 2,727  | 2,753  | 2,817  | 2,803  | 2,770  | 2,643  | 2,680  |
| Sociology .....                             | 1,434  | 1,390  | 1,392  | 1,311  | 1,299  | 1,152  | 1,065  | 949    |
| Sociology/anthropology .....                | 113    | 121    | 134    | 110    | 98     | 72     | 77     | 77     |
| Social sciences, other .....                | 983    | 1,078  | 1,084  | 1,102  | 1,102  | 1,099  | 1,104  | 1,176  |
| Engineering, total .....                    | 29,496 | 30,306 | 31,513 | 33,943 | 34,528 | 32,574 | 30,422 | 29,178 |
| Aerospace engineering .....                 | 1,031  | 1,015  | 1,140  | 1,124  | 1,060  | 1,084  | 1,138  | 1,082  |
| Agricultural engineering .....              | 482    | 499    | 469    | 493    | 463    | 432    | 441    | 447    |
| Biomedical engineering .....                | 422    | 568    | 588    | 662    | 723    | 699    | 730    | 662    |
| Chemical engineering .....                  | 2,402  | 2,614  | 2,775  | 2,990  | 2,998  | 2,934  | 2,741  | 2,650  |
| Civil engineering .....                     | 4,738  | 4,867  | 4,753  | 5,188  | 5,451  | 5,018  | 4,791  | 4,555  |
| Electrical engineering .....                | 8,411  | 8,743  | 9,023  | 9,928  | 10,419 | 9,942  | 8,947  | 8,857  |
| Engineering science .....                   | 615    | 557    | 507    | 590    | 613    | 573    | 514    | 418    |
| Industrial eng./manufacturing eng. ....     | 2,068  | 2,232  | 2,396  | 2,838  | 3,005  | 2,693  | 2,730  | 2,479  |
| Mechanical engineering .....                | 5,117  | 4,860  | 5,086  | 5,567  | 5,580  | 5,167  | 4,802  | 4,561  |
| Metallurgical/materials eng. ....           | 1,661  | 1,830  | 1,945  | 1,991  | 2,027  | 1,985  | 1,773  | 1,728  |
| Nuclear engineering .....                   | 461    | 484    | 503    | 490    | 473    | 436    | 379    | 351    |
| Engineering, other .....                    | 2,088  | 2,037  | 2,328  | 2,082  | 1,716  | 1,611  | 1,436  | 1,388  |
| Total, health fields .....                  | 3,052  | 3,286  | 3,556  | 3,761  | 3,693  | 3,817  | 3,639  | 3,701  |
| Clinical fields .....                       | 218    | 258    | 296    | 331    | 382    | 392    | 369    | 337    |
| Dental sciences .....                       | 152    | 167    | 184    | 223    | 228    | 236    | 210    | 233    |
| Nursing .....                               | 183    | 170    | 199    | 252    | 215    | 245    | 283    | 297    |
| Pharmaceutical sciences .....               | 814    | 904    | 959    | 984    | 974    | 954    | 871    | 957    |
| Preventive medicine/community health .....  | 874    | 879    | 977    | 962    | 841    | 869    | 728    | 723    |
| Speech pathology/audiology .....            | 264    | 276    | 289    | 315    | 327    | 339    | 335    | 271    |
| Veterinary sciences .....                   | 161    | 189    | 201    | 223    | 232    | 223    | 211    | 230    |
| Other health fields .....                   | 386    | 443    | 451    | 471    | 494    | 559    | 632    | 653    |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 20. Graduate students in science and engineering fields in all institutions, by enrollment status and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

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| Enrollment status, citizenship, and racial/ethnic background | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| Total enrollment .....                                       | 375,287 | 382,769 | 397,159 | 412,708 | 430,797 | 436,233 | 431,758 | 423,922 |
| Total U.S. citizens .....                                    | 281,672 | 284,686 | 294,339 | 304,073 | 321,281 | 330,447 | 329,391 | 325,135 |
| Black, non-Hispanic .....                                    | 11,191  | 11,775  | 12,774  | 13,691  | 15,449  | 17,147  | 17,665  | 18,366  |
| American Indian/Alaskan Native .....                         | 918     | 860     | 1,054   | 1,120   | 1,244   | 1,312   | 1,383   | 1,524   |
| Asian/Pacific Islander .....                                 | 15,188  | 15,693  | 17,156  | 18,139  | 21,762  | 24,149  | 26,457  | 26,015  |
| Hispanic .....   | 9,098   | 9,436   | 10,159  | 11,045  | 12,248  | 13,386  | 13,284  | 14,089  |
| White, non-Hispanic .....                                    | 229,037 | 229,694 | 238,492 | 243,608 | 253,516 | 257,009 | 255,976 | 246,776 |
| Other or unknown .....                                       | 16,240  | 17,228  | 14,704  | 16,470  | 17,062  | 17,444  | 14,626  | 18,365  |
| Non-U.S. citizens .....                                      | 93,615  | 98,083  | 102,820 | 108,635 | 109,516 | 105,786 | 102,367 | 98,787  |
| Full-time enrollment .....                                   | 250,667 | 256,928 | 265,423 | 277,183 | 290,654 | 294,227 | 293,324 | 288,016 |
| Total U.S. citizens .....                                    | 170,246 | 173,439 | 177,825 | 185,496 | 197,569 | 204,630 | 206,916 | 204,742 |
| Black, non-Hispanic .....                                    | 6,060   | 6,594   | 7,029   | 7,692   | 8,908   | 9,910   | 10,357  | 10,672  |
| American Indian/Alaskan Native .....                         | 570     | 551     | 655     | 717     | 848     | 899     | 960     | 1,064   |
| Asian/Pacific Islander .....                                 | 9,470   | 9,820   | 10,611  | 11,270  | 13,326  | 15,225  | 17,111  | 16,805  |
| Hispanic .....   | 5,503   | 5,924   | 6,389   | 6,931   | 7,597   | 8,202   | 8,180   | 9,057   |
| White, non-Hispanic .....                                    | 140,947 | 142,475 | 146,717 | 150,945 | 158,514 | 161,427 | 162,903 | 158,016 |
| Other or unknown .....                                       | 7,696   | 8,075   | 6,424   | 7,941   | 8,376   | 8,967   | 7,405   | 9,128   |
| Non-U.S. citizens .....                                      | 80,421  | 83,489  | 87,598  | 91,687  | 93,085  | 89,597  | 86,408  | 83,274  |
| Part-time enrollment .....                                   | 124,620 | 125,841 | 131,736 | 135,525 | 140,143 | 142,006 | 138,434 | 135,906 |
| Total U.S. citizens .....                                    | 111,426 | 111,247 | 116,514 | 118,577 | 123,712 | 125,817 | 122,475 | 120,393 |
| Black, non-Hispanic .....                                    | 5,131   | 5,181   | 5,745   | 5,999   | 6,541   | 7,237   | 7,308   | 7,694   |
| American Indian/Alaskan Native .....                         | 348     | 309     | 399     | 403     | 396     | 413     | 423     | 460     |
| Asian/Pacific Islander .....                                 | 5,718   | 5,873   | 6,545   | 6,869   | 8,436   | 8,924   | 9,346   | 9,210   |
| Hispanic .....   | 3,595   | 3,512   | 3,770   | 4,114   | 4,651   | 5,184   | 5,104   | 5,032   |
| White, non-Hispanic .....                                    | 88,090  | 87,219  | 91,775  | 92,663  | 95,002  | 95,582  | 93,073  | 88,760  |
| Other or unknown .....                                       | 8,544   | 9,153   | 8,280   | 8,529   | 8,686   | 8,477   | 7,221   | 9,237   |
| Non-U.S. citizens .....                                      | 13,194  | 14,594  | 15,222  | 16,948  | 16,431  | 16,189  | 15,959  | 15,513  |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 21. Graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

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| Field, citizenship, and racial/ethnic background | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....                 | 424,671 | 434,637 | 452,250 | 471,314 | 493,826 | 504,838 | 505,259 | 501,510 |
| Total U.S. citizens .....                        | 327,423 | 332,655 | 345,177 | 358,124 | 379,844 | 394,435 | 398,481 | 398,287 |
| Black, non-Hispanic .....                        | 13,367  | 14,037  | 15,219  | 16,409  | 18,493  | 20,470  | 21,240  | 22,252  |
| American Indian/Alaskan Native .....             | 1,093   | 1,068   | 1,270   | 1,365   | 1,516   | 1,609   | 1,725   | 1,866   |
| Asian/Pacific Islander .....                     | 16,449  | 17,110  | 18,802  | 20,062  | 23,976  | 26,939  | 29,605  | 29,491  |
| Hispanic .....                                   | 10,880  | 11,210  | 12,018  | 13,056  | 14,630  | 16,060  | 15,975  | 17,214  |
| White, non-Hispanic .....                        | 267,182 | 269,811 | 281,619 | 288,855 | 302,286 | 309,444 | 312,421 | 305,564 |
| Other or unknown .....                           | 18,452  | 19,419  | 16,249  | 18,377  | 18,943  | 19,913  | 17,515  | 21,900  |
| Non-U.S. citizens .....                          | 97,248  | 101,982 | 107,073 | 113,190 | 113,982 | 110,403 | 106,778 | 103,223 |
| Total, science and engineering .....             | 375,287 | 382,769 | 397,159 | 412,708 | 430,797 | 436,233 | 431,758 | 423,922 |
| Total U.S. citizens .....                        | 281,672 | 284,686 | 294,339 | 304,073 | 321,281 | 330,447 | 329,391 | 325,135 |
| Black, non-Hispanic .....                        | 11,191  | 11,775  | 12,774  | 13,691  | 15,449  | 17,147  | 17,665  | 18,366  |
| American Indian/Alaskan Native .....             | 918     | 860     | 1,054   | 1,120   | 1,244   | 1,312   | 1,383   | 1,524   |
| Asian/Pacific Islander .....                     | 15,188  | 15,693  | 17,156  | 18,139  | 21,762  | 24,149  | 26,457  | 26,015  |
| Hispanic .....                                   | 9,098   | 9,436   | 10,159  | 11,045  | 12,248  | 13,386  | 13,284  | 14,089  |
| White, non-Hispanic .....                        | 229,037 | 229,694 | 238,492 | 243,608 | 253,516 | 257,009 | 255,976 | 246,776 |
| Other or unknown .....                           | 16,240  | 17,228  | 14,704  | 16,470  | 17,062  | 17,444  | 14,626  | 18,365  |
| Non-U.S. citizens .....                          | 93,615  | 98,083  | 102,820 | 108,635 | 109,516 | 105,786 | 102,367 | 98,787  |
| Sciences, total .....                            | 272,458 | 278,726 | 289,534 | 299,132 | 312,762 | 319,352 | 318,698 | 316,393 |
| Total U.S. citizens .....                        | 214,069 | 217,340 | 224,913 | 231,840 | 244,686 | 252,833 | 253,326 | 253,093 |
| Black, non-Hispanic .....                        | 9,691   | 10,159  | 10,988  | 11,666  | 13,075  | 14,588  | 14,882  | 15,494  |
| American Indian/Alaskan Native .....             | 775     | 738     | 902     | 935     | 1,067   | 1,101   | 1,141   | 1,293   |
| Asian/Pacific Islander .....                     | 9,278   | 9,682   | 10,469  | 11,023  | 13,270  | 15,150  | 16,656  | 16,897  |
| Hispanic .....                                   | 7,379   | 7,729   | 8,273   | 8,921   | 9,785   | 10,692  | 10,427  | 11,258  |
| White, non-Hispanic .....                        | 176,708 | 178,201 | 185,285 | 188,824 | 196,120 | 199,558 | 199,945 | 194,663 |
| Other or unknown .....                           | 10,238  | 10,831  | 8,996   | 10,471  | 11,369  | 11,744  | 10,275  | 13,488  |
| Non-U.S. citizens .....                          | 58,389  | 61,386  | 64,621  | 67,292  | 68,076  | 66,519  | 65,372  | 63,300  |
| Physical sciences .....                          | 32,962  | 33,616  | 34,075  | 34,710  | 35,348  | 35,318  | 34,449  | 33,470  |
| Total U.S. citizens .....                        | 21,890  | 21,843  | 21,609  | 21,985  | 22,543  | 23,066  | 22,742  | 22,028  |
| Black, non-Hispanic .....                        | 569     | 633     | 654     | 699     | 807     | 843     | 856     | 894     |
| American Indian/Alaskan Native .....             | 52      | 44      | 63      | 62      | 67      | 81      | 67      | 78      |
| Asian/Pacific Islander .....                     | 1,253   | 1,175   | 1,200   | 1,429   | 1,615   | 1,973   | 1,925   | 1,797   |
| Hispanic .....                                   | 624     | 680     | 642     | 649     | 680     | 747     | 675     | 732     |
| White, non-Hispanic .....                        | 18,282  | 18,318  | 18,433  | 18,402  | 18,527  | 18,582  | 18,422  | 17,506  |
| Other or unknown .....                           | 1,110   | 993     | 617     | 744     | 847     | 840     | 797     | 1,021   |
| Non-U.S. citizens .....                          | 11,072  | 11,773  | 12,466  | 12,725  | 12,805  | 12,252  | 11,707  | 11,442  |
| Earth, atmospheric, & ocean sciences .....       | 13,867  | 13,643  | 13,984  | 14,480  | 15,347  | 15,805  | 16,042  | 15,802  |
| Total U.S. citizens .....                        | 11,459  | 11,068  | 11,309  | 11,583  | 12,343  | 12,795  | 12,776  | 12,866  |
| Black, non-Hispanic .....                        | 107     | 95      | 123     | 141     | 202     | 227     | 203     | 220     |
| American Indian/Alaskan Native .....             | 27      | 26      | 30      | 29      | 35      | 46      | 49      | 53      |
| Asian/Pacific Islander .....                     | 209     | 207     | 258     | 267     | 383     | 469     | 454     | 423     |
| Hispanic .....                                   | 210     | 209     | 241     | 250     | 308     | 371     | 344     | 369     |
| White, non-Hispanic .....                        | 10,415  | 10,137  | 10,375  | 10,531  | 10,893  | 11,145  | 11,351  | 11,324  |
| Other or unknown .....                           | 491     | 394     | 282     | 365     | 522     | 537     | 375     | 477     |
| Non-U.S. citizens .....                          | 2,408   | 2,575   | 2,675   | 2,897   | 3,004   | 3,010   | 3,266   | 2,936   |
| Mathematical sciences .....                      | 19,077  | 19,247  | 19,774  | 19,952  | 20,355  | 20,000  | 19,579  | 18,509  |
| Total U.S. citizens .....                        | 12,652  | 12,564  | 13,210  | 13,318  | 13,878  | 13,866  | 13,496  | 12,688  |
| Black, non-Hispanic .....                        | 422     | 463     | 511     | 524     | 579     | 710     | 672     | 690     |
| American Indian/Alaskan Native .....             | 32      | 34      | 20      | 20      | 27      | 32      | 36      | 70      |
| Asian/Pacific Islander .....                     | 756     | 703     | 822     | 866     | 963     | 1,020   | 1,199   | 1,124   |
| Hispanic .....                                   | 328     | 305     | 351     | 349     | 376     | 415     | 369     | 400     |
| White, non-Hispanic .....                        | 10,133  | 10,064  | 10,605  | 10,457  | 10,851  | 10,572  | 10,486  | 9,630   |
| Other or unknown .....                           | 981     | 995     | 901     | 1,102   | 1,082   | 1,117   | 734     | 774     |
| Non-U.S. citizens .....                          | 6,425   | 6,683   | 6,564   | 6,634   | 6,477   | 6,134   | 6,083   | 5,821   |
| Computer sciences .....                          | 32,227  | 32,482  | 34,257  | 34,610  | 36,320  | 36,298  | 34,278  | 33,509  |
| Total U.S. citizens .....                        | 23,243  | 22,788  | 23,351  | 22,988  | 24,165  | 24,344  | 23,200  | 22,796  |
| Black, non-Hispanic .....                        | 839     | 848     | 985     | 1,093   | 1,108   | 1,193   | 1,216   | 1,189   |
| American Indian/Alaskan Native .....             | 39      | 40      | 44      | 42      | 72      | 68      | 43      | 55      |
| Asian/Pacific Islander .....                     | 2,682   | 2,727   | 2,888   | 2,858   | 3,400   | 3,572   | 4,103   | 4,103   |
| Hispanic .....                                   | 516     | 542     | 565     | 631     | 706     | 699     | 637     | 660     |
| White, non-Hispanic .....                        | 17,346  | 16,496  | 17,292  | 16,464  | 16,894  | 16,801  | 15,759  | 14,795  |
| Other or unknown .....                           | 1,821   | 2,135   | 1,577   | 1,900   | 1,985   | 2,011   | 1,442   | 1,994   |
| Non-U.S. citizens .....                          | 8,984   | 9,694   | 10,906  | 11,622  | 12,155  | 11,954  | 11,078  | 10,713  |

See explanatory information, if any, and SOURCE at end of table.

**Table 21. Graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

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| Field, citizenship, and racial/ethnic background | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| Agricultural sciences .....                      | 11,135  | 11,190  | 11,316  | 11,506  | 11,827  | 11,914  | 12,199  | 12,426  |
| Total U.S. citizens .....                        | 8,206   | 8,251   | 8,133   | 8,298   | 8,649   | 8,778   | 9,060   | 9,304   |
| Black, non-Hispanic .....                        | 143     | 153     | 158     | 145     | 209     | 235     | 239     | 293     |
| American Indian/Alaskan Native .....             | 33      | 25      | 20      | 31      | 39      | 34      | 37      | 58      |
| Asian/Pacific Islander .....                     | 217     | 236     | 242     | 225     | 215     | 264     | 276     | 273     |
| Hispanic .....                                   | 278     | 297     | 272     | 279     | 279     | 308     | 263     | 289     |
| White, non-Hispanic .....                        | 7,315   | 7,294   | 7,251   | 7,481   | 7,679   | 7,731   | 7,972   | 8,013   |
| Other or unknown .....                           | 220     | 246     | 190     | 137     | 228     | 206     | 273     | 378     |
| Non-U.S. citizens .....                          | 2,929   | 2,939   | 3,183   | 3,208   | 3,178   | 3,136   | 3,139   | 3,122   |
| Biological sciences .....                        | 47,565  | 48,852  | 49,989  | 51,778  | 54,177  | 56,452  | 58,143  | 58,753  |
| Total U.S. citizens .....                        | 37,876  | 38,080  | 38,470  | 39,282  | 41,358  | 43,525  | 45,274  | 46,455  |
| Black, non-Hispanic .....                        | 1,153   | 1,212   | 1,249   | 1,317   | 1,493   | 1,737   | 1,709   | 1,879   |
| American Indian/Alaskan Native .....             | 104     | 85      | 142     | 129     | 141     | 157     | 183     | 214     |
| Asian/Pacific Islander .....                     | 1,799   | 1,986   | 2,228   | 2,346   | 2,822   | 3,456   | 3,913   | 4,247   |
| Hispanic .....                                   | 1,116   | 1,200   | 1,220   | 1,374   | 1,459   | 1,649   | 1,651   | 1,810   |
| White, non-Hispanic .....                        | 32,725  | 32,361  | 32,677  | 33,058  | 34,229  | 35,094  | 36,389  | 36,489  |
| Other or unknown .....                           | 979     | 1,236   | 954     | 1,058   | 1,214   | 1,432   | 1,429   | 1,816   |
| Non-U.S. citizens .....                          | 9,689   | 10,772  | 11,519  | 12,496  | 12,819  | 12,927  | 12,869  | 12,298  |
| Psychology .....                                 | 43,963  | 45,528  | 48,168  | 51,343  | 53,599  | 54,680  | 54,726  | 54,243  |
| Total U.S. citizens .....                        | 42,316  | 43,897  | 46,350  | 49,355  | 51,638  | 52,771  | 52,363  | 52,126  |
| Black, non-Hispanic .....                        | 1,945   | 2,061   | 2,226   | 2,455   | 2,762   | 3,288   | 3,545   | 3,422   |
| American Indian/Alaskan Native .....             | 177     | 180     | 235     | 252     | 291     | 290     | 317     | 331     |
| Asian/Pacific Islander .....                     | 747     | 817     | 962     | 1,040   | 1,284   | 1,476   | 1,586   | 1,596   |
| Hispanic .....                                   | 1,722   | 1,751   | 2,160   | 2,365   | 2,373   | 2,564   | 2,488   | 2,777   |
| White, non-Hispanic .....                        | 35,920  | 37,227  | 39,247  | 40,990  | 42,500  | 42,744  | 42,191  | 40,679  |
| Other or unknown .....                           | 1,805   | 1,861   | 1,520   | 2,253   | 2,428   | 2,409   | 2,236   | 3,321   |
| Non-U.S. citizens .....                          | 1,647   | 1,631   | 1,818   | 1,988   | 1,961   | 1,909   | 2,363   | 2,117   |
| Social sciences .....                            | 71,662  | 74,168  | 77,971  | 80,753  | 85,789  | 88,885  | 89,282  | 89,681  |
| Total U.S. citizens .....                        | 56,427  | 58,849  | 62,481  | 65,031  | 70,112  | 73,688  | 74,415  | 74,830  |
| Black, non-Hispanic .....                        | 4,513   | 4,694   | 5,082   | 5,292   | 5,915   | 6,355   | 6,442   | 6,907   |
| American Indian/Alaskan Native .....             | 311     | 304     | 348     | 370     | 395     | 393     | 409     | 434     |
| Asian/Pacific Islander .....                     | 1,615   | 1,831   | 1,869   | 1,992   | 2,588   | 2,920   | 3,200   | 3,334   |
| Hispanic .....                                   | 2,585   | 2,745   | 2,822   | 3,024   | 3,604   | 3,939   | 4,000   | 4,221   |
| White, non-Hispanic .....                        | 44,572  | 46,304  | 49,405  | 51,441  | 54,547  | 56,889  | 57,375  | 56,227  |
| Other or unknown .....                           | 2,831   | 2,971   | 2,955   | 2,912   | 3,063   | 3,192   | 2,989   | 3,707   |
| Non-U.S. citizens .....                          | 15,235  | 15,319  | 15,490  | 15,722  | 15,677  | 15,197  | 14,867  | 14,851  |
| Engineering, total .....                         | 102,829 | 104,043 | 107,625 | 113,576 | 118,035 | 116,881 | 113,060 | 107,529 |
| Total U.S. citizens .....                        | 67,603  | 67,346  | 69,426  | 72,233  | 76,595  | 77,614  | 76,065  | 72,042  |
| Black, non-Hispanic .....                        | 1,500   | 1,616   | 1,786   | 2,025   | 2,374   | 2,559   | 2,783   | 2,872   |
| American Indian/Alaskan Native .....             | 143     | 122     | 152     | 185     | 177     | 211     | 242     | 231     |
| Asian/Pacific Islander .....                     | 5,910   | 6,011   | 6,687   | 7,116   | 8,492   | 8,999   | 9,801   | 9,118   |
| Hispanic .....                                   | 1,719   | 1,707   | 1,886   | 2,124   | 2,463   | 2,694   | 2,857   | 2,831   |
| White, non-Hispanic .....                        | 52,329  | 51,493  | 53,207  | 54,784  | 57,396  | 57,451  | 56,031  | 52,113  |
| Other or unknown .....                           | 6,002   | 6,397   | 5,708   | 5,999   | 5,693   | 5,700   | 4,351   | 4,877   |
| Non-U.S. citizens .....                          | 35,226  | 36,697  | 38,199  | 41,343  | 41,440  | 39,267  | 36,995  | 35,487  |
| Chemical engineering .....                       | 6,618   | 6,460   | 6,735   | 7,127   | 7,397   | 7,516   | 7,608   | 7,432   |
| Total U.S. citizens .....                        | 4,071   | 3,662   | 3,791   | 3,939   | 4,122   | 4,348   | 4,595   | 4,482   |
| Black, non-Hispanic .....                        | 84      | 79      | 84      | 119     | 144     | 159     | 157     | 174     |
| American Indian/Alaskan Native .....             | 24      | 10      | 5       | 22      | 15      | 14      | 18      | 21      |
| Asian/Pacific Islander .....                     | 302     | 235     | 316     | 399     | 379     | 461     | 521     | 461     |
| Hispanic .....                                   | 135     | 111     | 143     | 159     | 176     | 180     | 171     | 202     |
| White, non-Hispanic .....                        | 3,382   | 3,097   | 3,151   | 3,140   | 3,236   | 3,388   | 3,519   | 3,418   |
| Other or unknown .....                           | 144     | 130     | 92      | 100     | 172     | 146     | 209     | 206     |
| Non-U.S. citizens .....                          | 2,547   | 2,798   | 2,944   | 3,188   | 3,275   | 3,168   | 3,013   | 2,950   |
| Civil engineering .....                          | 14,811  | 14,909  | 15,542  | 17,398  | 19,572  | 19,583  | 19,925  | 19,218  |
| Total U.S. citizens .....                        | 9,000   | 9,074   | 9,628   | 10,854  | 12,734  | 13,299  | 13,991  | 13,618  |
| Black, non-Hispanic .....                        | 189     | 244     | 232     | 279     | 343     | 393     | 423     | 474     |
| American Indian/Alaskan Native .....             | 22      | 22      | 37      | 34      | 31      | 43      | 38      | 42      |
| Asian/Pacific Islander .....                     | 601     | 597     | 760     | 837     | 1,043   | 1,167   | 1,374   | 1,360   |
| Hispanic .....                                   | 263     | 275     | 302     | 383     | 478     | 550     | 549     | 590     |
| White, non-Hispanic .....                        | 7,370   | 7,337   | 7,727   | 8,684   | 10,196  | 10,415  | 11,025  | 10,460  |
| Other or unknown .....                           | 555     | 599     | 570     | 637     | 643     | 731     | 582     | 692     |
| Non-U.S. citizens .....                          | 5,811   | 5,835   | 5,914   | 6,544   | 6,838   | 6,284   | 5,934   | 5,600   |

See explanatory information, if any, and SOURCE at end of table.

**Table 21. Graduate students in science, engineering, and health fields in all institutions, by field and citizenship, and by racial/ethnic background of U.S. citizens: 1988-95**

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| Field, citizenship, and racial/ethnic background | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Electrical engineering .....                     | 32,035 | 33,257 | 33,722 | 35,182 | 36,460 | 35,337 | 33,052 | 31,060 |
| Total U.S. citizens .....                        | 21,670 | 22,109 | 22,127 | 22,366 | 23,627 | 22,897 | 21,644 | 19,752 |
| Black, non-Hispanic .....                        | 514    | 564    | 612    | 669    | 771    | 863    | 861    | 831    |
| American Indian/Alaskan Native .....             | 39     | 37     | 49     | 39     | 38     | 45     | 53     | 52     |
| Asian/Pacific Islander .....                     | 2,587  | 2,703  | 3,050  | 3,026  | 3,755  | 3,749  | 4,088  | 3,762  |
| Hispanic .....                                   | 528    | 558    | 576    | 661    | 748    | 841    | 853    | 794    |
| White, non-Hispanic .....                        | 15,404 | 15,818 | 15,662 | 15,571 | 15,996 | 15,661 | 14,336 | 12,751 |
| Other or unknown .....                           | 2,598  | 2,429  | 2,178  | 2,400  | 2,319  | 1,738  | 1,453  | 1,562  |
| Non-U.S. citizens .....                          | 10,365 | 11,148 | 11,595 | 12,816 | 12,833 | 12,440 | 11,408 | 11,308 |
| Industrial engineering .....                     | 11,393 | 11,094 | 11,248 | 12,676 | 13,525 | 13,596 | 13,696 | 13,182 |
| Total U.S. citizens .....                        | 8,710  | 8,176  | 8,129  | 8,902  | 9,682  | 10,153 | 10,120 | 9,865  |
| Black, non-Hispanic .....                        | 267    | 253    | 294    | 384    | 444    | 440    | 507    | 525    |
| American Indian/Alaskan Native .....             | 14     | 15     | 23     | 39     | 42     | 36     | 23     | 23     |
| Asian/Pacific Islander .....                     | 467    | 451    | 450    | 586    | 794    | 863    | 855    | 829    |
| Hispanic .....                                   | 280    | 241    | 231    | 253    | 297    | 332    | 375    | 392    |
| White, non-Hispanic .....                        | 7,130  | 6,537  | 6,407  | 7,016  | 7,375  | 7,448  | 7,503  | 7,084  |
| Other or unknown .....                           | 552    | 679    | 724    | 624    | 730    | 1,034  | 857    | 1,012  |
| Non-U.S. citizens .....                          | 2,683  | 2,918  | 3,119  | 3,774  | 3,843  | 3,443  | 3,576  | 3,317  |
| Mechanical engineering .....                     | 16,151 | 16,265 | 16,879 | 17,730 | 18,637 | 18,477 | 17,761 | 16,360 |
| Total U.S. citizens .....                        | 10,131 | 10,450 | 10,799 | 11,056 | 11,875 | 12,199 | 11,923 | 10,918 |
| Black, non-Hispanic .....                        | 200    | 200    | 247    | 246    | 320    | 336    | 398    | 403    |
| American Indian/Alaskan Native .....             | 12     | 13     | 15     | 21     | 24     | 30     | 54     | 44     |
| Asian/Pacific Islander .....                     | 769    | 824    | 830    | 985    | 1,179  | 1,307  | 1,410  | 1,243  |
| Hispanic .....                                   | 217    | 214    | 282    | 338    | 394    | 382    | 451    | 420    |
| White, non-Hispanic .....                        | 7,841  | 7,633  | 8,238  | 8,416  | 9,035  | 9,029  | 8,890  | 8,059  |
| Other or unknown .....                           | 1,092  | 1,566  | 1,187  | 1,050  | 923    | 1,115  | 720    | 749    |
| Non-U.S. citizens .....                          | 6,020  | 5,815  | 6,080  | 6,674  | 6,762  | 6,278  | 5,838  | 5,442  |
| Other engineering .....                          | 21,821 | 22,058 | 23,499 | 23,463 | 22,444 | 22,372 | 21,018 | 20,277 |
| Total U.S. citizens .....                        | 14,021 | 13,875 | 14,952 | 15,116 | 14,555 | 14,718 | 13,792 | 13,407 |
| Black, non-Hispanic .....                        | 246    | 276    | 317    | 328    | 352    | 368    | 437    | 465    |
| American Indian/Alaskan Native .....             | 32     | 25     | 23     | 30     | 27     | 43     | 56     | 49     |
| Asian/Pacific Islander .....                     | 1,184  | 1,201  | 1,281  | 1,283  | 1,342  | 1,452  | 1,553  | 1,463  |
| Hispanic .....                                   | 296    | 308    | 352    | 330    | 370    | 409    | 458    | 433    |
| White, non-Hispanic .....                        | 11,202 | 11,071 | 12,022 | 11,957 | 11,558 | 11,510 | 10,758 | 10,341 |
| Other or unknown .....                           | 1,061  | 994    | 957    | 1,188  | 906    | 936    | 530    | 656    |
| Non-U.S. citizens .....                          | 7,800  | 8,183  | 8,547  | 8,347  | 7,889  | 7,654  | 7,226  | 6,870  |
| Total, health fields .....                       | 49,384 | 51,868 | 55,091 | 58,606 | 63,029 | 68,605 | 73,501 | 77,588 |
| Total U.S. citizens .....                        | 45,751 | 47,969 | 50,838 | 54,051 | 58,563 | 63,988 | 69,090 | 73,152 |
| Black, non-Hispanic .....                        | 2,176  | 2,262  | 2,445  | 2,718  | 3,044  | 3,323  | 3,575  | 3,886  |
| American Indian/Alaskan Native .....             | 175    | 208    | 216    | 245    | 272    | 297    | 342    | 342    |
| Asian/Pacific Islander .....                     | 1,261  | 1,417  | 1,646  | 1,923  | 2,214  | 2,790  | 3,148  | 3,476  |
| Hispanic .....                                   | 1,782  | 1,774  | 1,859  | 2,011  | 2,382  | 2,674  | 2,691  | 3,125  |
| White, non-Hispanic .....                        | 38,145 | 40,117 | 43,127 | 45,247 | 48,770 | 52,435 | 56,445 | 58,788 |
| Other or unknown .....                           | 2,212  | 2,191  | 1,545  | 1,907  | 1,881  | 2,469  | 2,889  | 3,535  |
| Non-U.S. citizens .....                          | 3,633  | 3,899  | 4,253  | 4,555  | 4,466  | 4,617  | 4,411  | 4,436  |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 22. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-95**

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| Sex, field, and year                   | Total   | Racial/ethnic background of U.S. citizens |                                |                        |          |                    |                  | Non-U.S. citizens |
|--|---------|---|--------------------------------|------------------------|----------|--------------------|------------------|-------------------|
|  |         | Black non-Hispanic                        | American Indian/Alaskan Native | Asian/Pacific Islander | Hispanic | White non-Hispanic | Other or unknown |                   |
| Total enrollment                       |         |   |                                |                        |          |                    |                  |                   |
| Total, all surveyed fields:            |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 505,259 | 21,240                                    | 1,725                          | 29,605                 | 15,975   | 312,421            | 17,515           | 106,778           |
| 1995 .....                             | 501,510 | 22,252                                    | 1,866                          | 29,491                 | 17,214   | 305,564            | 21,900           | 103,223           |
| Total, science and engineering fields: |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 431,758 | 17,665                                    | 1,383                          | 26,457                 | 13,284   | 255,976            | 14,626           | 102,367           |
| 1995 .....                             | 423,922 | 18,366                                    | 1,524                          | 26,015                 | 14,089   | 246,776            | 18,365           | 98,787            |
| Sciences, total:                       |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 318,698 | 14,882                                    | 1,141                          | 16,656                 | 10,427   | 199,945            | 10,275           | 65,372            |
| 1995 .....                             | 316,393 | 15,494                                    | 1,293                          | 16,897                 | 11,258   | 194,663            | 13,488           | 63,300            |
| Physical sciences:                     |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 34,449  | 856                                       | 67                             | 1,925                  | 675      | 18,422             | 797              | 11,707            |
| 1995 .....                             | 33,470  | 894                                       | 78                             | 1,797                  | 732      | 17,506             | 1,021            | 11,442            |
| Earth, atmospheric, & ocean sciences:  |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 16,042  | 203                                       | 49                             | 454                    | 344      | 11,351             | 375              | 3,266             |
| 1995 .....                             | 15,802  | 220                                       | 53                             | 423                    | 369      | 11,324             | 477              | 2,936             |
| Mathematical sciences:                 |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 19,579  | 672                                       | 36                             | 1,199                  | 369      | 10,486             | 734              | 6,083             |
| 1995 .....                             | 18,509  | 690                                       | 70                             | 1,124                  | 400      | 9,630              | 774              | 5,821             |
| Computer sciences:                     |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 34,278  | 1,216                                     | 43                             | 4,103                  | 637      | 15,759             | 1,442            | 11,078            |
| 1995 .....                             | 33,509  | 1,189                                     | 55                             | 4,103                  | 660      | 14,795             | 1,994            | 10,713            |
| Agricultural sciences:                 |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 12,199  | 239                                       | 37                             | 276                    | 263      | 7,972              | 273              | 3,139             |
| 1995 .....                             | 12,426  | 293                                       | 58                             | 273                    | 289      | 8,013              | 378              | 3,122             |
| Biological sciences:                   |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 58,143  | 1,709                                     | 183                            | 3,913                  | 1,651    | 36,389             | 1,429            | 12,869            |
| 1995 .....                             | 58,753  | 1,879                                     | 214                            | 4,247                  | 1,810    | 36,489             | 1,816            | 12,298            |
| Psychology:                            |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 54,726  | 3,545                                     | 317                            | 1,586                  | 2,488    | 42,191             | 2,236            | 2,363             |
| 1995 .....                             | 54,243  | 3,422                                     | 331                            | 1,596                  | 2,777    | 40,679             | 3,321            | 2,117             |
| Social sciences:                       |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 89,282  | 6,442                                     | 409                            | 3,200                  | 4,000    | 57,375             | 2,989            | 14,867            |
| 1995 .....                             | 89,681  | 6,907                                     | 434                            | 3,334                  | 4,221    | 56,227             | 3,707            | 14,851            |
| Engineering:                           |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 113,060 | 2,783                                     | 242                            | 9,801                  | 2,857    | 56,031             | 4,351            | 36,995            |
| 1995 .....                             | 107,529 | 2,872                                     | 231                            | 9,118                  | 2,831    | 52,113             | 4,877            | 35,487            |
| Health fields:                         |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 73,501  | 3,575                                     | 342                            | 3,148                  | 2,691    | 56,445             | 2,889            | 4,411             |
| 1995 .....                             | 77,588  | 3,886                                     | 342                            | 3,476                  | 3,125    | 58,788             | 3,535            | 4,436             |

See explanatory information, if any, and SOURCE at end of table.

**Table 22. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-95**

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| Sex, field, and year                   | Total   | Racial/ethnic background of U.S. citizens |                                |                        |          |                    |                  | Non-U.S. citizens |
|--|---------|---|--------------------------------|------------------------|----------|--------------------|------------------|-------------------|
|  |         | Black non-Hispanic                        | American Indian/Alaskan Native | Asian/Pacific Islander | Hispanic | White non-Hispanic | Other or unknown |                   |
| Men                                    |         |   |                                |                        |          |                    |                  |                   |
| Total, all surveyed fields:            |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 288,757 | 8,679                                     | 770                            | 18,178                 | 7,814    | 164,879            | 9,851            | 78,586            |
| 1995 .....                             | 280,309 | 8,944                                     | 830                            | 17,576                 | 8,149    | 158,051            | 12,035           | 74,724            |
| Total, science and engineering fields: |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 272,420 | 8,056                                     | 692                            | 17,138                 | 7,175    | 153,794            | 9,116            | 76,449            |
| 1995 .....                             | 263,058 | 8,219                                     | 750                            | 16,461                 | 7,363    | 146,523            | 11,176           | 72,566            |
| Sciences, total:                       |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 177,414 | 6,098                                     | 514                            | 9,153                  | 4,914    | 106,986            | 5,478            | 44,271            |
| 1995 .....                             | 173,681 | 6,258                                     | 570                            | 9,142                  | 5,163    | 103,362            | 7,075            | 42,111            |
| Physical sciences:                     |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 25,290  | 497                                       | 49                             | 1,255                  | 444      | 13,745             | 562              | 8,738             |
| 1995 .....                             | 24,359  | 526                                       | 59                             | 1,174                  | 470      | 13,018             | 722              | 8,390             |
| Earth, atmospheric, & ocean sciences:  |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 10,689  | 118                                       | 26                             | 297                    | 214      | 7,403              | 242              | 2,389             |
| 1995 .....                             | 10,323  | 117                                       | 31                             | 261                    | 226      | 7,234              | 303              | 2,151             |
| Mathematical sciences:                 |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 13,044  | 341                                       | 24                             | 728                    | 236      | 6,817              | 500              | 4,398             |
| 1995 .....                             | 12,248  | 384                                       | 43                             | 674                    | 243      | 6,211              | 523              | 4,170             |
| Computer sciences:                     |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 26,126  | 706                                       | 36                             | 2,729                  | 476      | 12,472             | 1,053            | 8,654             |
| 1995 .....                             | 25,334  | 663                                       | 40                             | 2,747                  | 498      | 11,697             | 1,545            | 8,144             |
| Agricultural sciences:                 |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 7,911   | 118                                       | 20                             | 168                    | 142      | 5,002              | 165              | 2,296             |
| 1995 .....                             | 7,975   | 150                                       | 29                             | 149                    | 155      | 5,005              | 235              | 2,252             |
| Biological sciences:                   |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 29,988  | 671                                       | 77                             | 1,992                  | 767      | 18,472             | 714              | 7,295             |
| 1995 .....                             | 29,934  | 689                                       | 93                             | 2,130                  | 843      | 18,395             | 974              | 6,810             |
| Psychology:                            |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 16,486  | 854                                       | 97                             | 436                    | 706      | 12,765             | 675              | 953               |
| 1995 .....                             | 16,101  | 833                                       | 94                             | 414                    | 747      | 12,186             | 950              | 877               |
| Social sciences:                       |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 47,880  | 2,793                                     | 185                            | 1,548                  | 1,929    | 30,310             | 1,567            | 9,548             |
| 1995 .....                             | 47,407  | 2,896                                     | 181                            | 1,593                  | 1,981    | 29,616             | 1,823            | 9,317             |
| Engineering:                           |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 95,006  | 1,958                                     | 178                            | 7,985                  | 2,261    | 46,808             | 3,638            | 32,178            |
| 1995 .....                             | 89,377  | 1,961                                     | 180                            | 7,319                  | 2,200    | 43,161             | 4,101            | 30,455            |
| Health fields:                         |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 16,337  | 623                                       | 78                             | 1,040                  | 639      | 11,085             | 735              | 2,137             |
| 1995 .....                             | 17,251  | 725                                       | 80                             | 1,115                  | 786      | 11,528             | 859              | 2,158             |

See explanatory information, if any, and SOURCE at end of table.

**Table 22. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-95**

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| Sex, field, and year                   | Total   | Racial/ethnic background of U.S. citizens |                                |                        |          |                    |                  | Non-U.S. citizens |
|--|---------|---|--------------------------------|------------------------|----------|--------------------|------------------|-------------------|
|  |         | Black non-Hispanic                        | American Indian/Alaskan Native | Asian/Pacific Islander | Hispanic | White non-Hispanic | Other or unknown |                   |
| Women                                  |         |   |                                |                        |          |                    |                  |                   |
| Total, all surveyed fields:            |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 216,502 | 12,561                                    | 955                            | 11,427                 | 8,161    | 147,542            | 7,664            | 28,192            |
| 1995 .....                             | 221,201 | 13,308                                    | 1,036                          | 11,915                 | 9,065    | 147,513            | 9,865            | 28,499            |
| Total, science and engineering fields: |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 159,338 | 9,609                                     | 691                            | 9,319                  | 6,109    | 102,182            | 5,510            | 25,918            |
| 1995 .....                             | 160,864 | 10,147                                    | 774                            | 9,554                  | 6,726    | 100,253            | 7,189            | 26,221            |
| Sciences, total:                       |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 141,284 | 8,784                                     | 627                            | 7,503                  | 5,513    | 92,959             | 4,797            | 21,101            |
| 1995 .....                             | 142,712 | 9,236                                     | 723                            | 7,755                  | 6,095    | 91,301             | 6,413            | 21,189            |
| Physical sciences:                     |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 9,159   | 359                                       | 18                             | 670                    | 231      | 4,677              | 235              | 2,969             |
| 1995 .....                             | 9,111   | 368                                       | 19                             | 623                    | 262      | 4,488              | 299              | 3,052             |
| Earth, atmospheric, & ocean sciences:  |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 5,353   | 85  | 23                             | 157                    | 130      | 3,948              | 133              | 877               |
| 1995 .....                             | 5,479   | 103                                       | 22                             | 162                    | 143      | 4,090              | 174              | 785               |
| Mathematical sciences:                 |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 6,535   | 331                                       | 12                             | 471                    | 133      | 3,669              | 234              | 1,685             |
| 1995 .....                             | 6,261   | 306                                       | 27                             | 450                    | 157      | 3,419              | 251              | 1,651             |
| Computer sciences:                     |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 8,152   | 510                                       | 7                              | 1,374                  | 161      | 3,287              | 389              | 2,424             |
| 1995 .....                             | 8,175   | 526                                       | 15                             | 1,356                  | 162      | 3,098              | 449              | 2,569             |
| Agricultural sciences:                 |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 4,288   | 121                                       | 17                             | 108                    | 121      | 2,970              | 108              | 843               |
| 1995 .....                             | 4,451   | 143                                       | 29                             | 124                    | 134      | 3,008              | 143              | 870               |
| Biological sciences:                   |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 28,155  | 1,038                                     | 106                            | 1,921                  | 884      | 17,917             | 715              | 5,574             |
| 1995 .....                             | 28,819  | 1,190                                     | 121                            | 2,117                  | 967      | 18,094             | 842              | 5,488             |
| Psychology:                            |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 38,240  | 2,691                                     | 220                            | 1,150                  | 1,782    | 29,426             | 1,561            | 1,410             |
| 1995 .....                             | 38,142  | 2,589                                     | 237                            | 1,182                  | 2,030    | 28,493             | 2,371            | 1,240             |
| Social sciences:                       |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 41,402  | 3,649                                     | 224                            | 1,652                  | 2,071    | 27,065             | 1,422            | 5,319             |
| 1995 .....                             | 42,274  | 4,011                                     | 253                            | 1,741                  | 2,240    | 26,611             | 1,884            | 5,534             |
| Engineering:                           |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 18,054  | 825                                       | 64                             | 1,816                  | 596      | 9,223              | 713              | 4,817             |
| 1995 .....                             | 18,152  | 911                                       | 51                             | 1,799                  | 631      | 8,952              | 776              | 5,032             |
| Health fields:                         |         |   |                                |                        |          |                    |                  |                   |
| 1994 .....                             | 57,164  | 2,952                                     | 264                            | 2,108                  | 2,052    | 45,360             | 2,154            | 2,274             |
| 1995 .....                             | 60,337  | 3,161                                     | 262                            | 2,361                  | 2,339    | 47,260             | 2,676            | 2,278             |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 23. Male graduate students in science, engineering, and health fields in all institutions,  
by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**

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| Field                                       | Total   | Racial/ethnic background of U.S. citizens |  |                               |          |                           |                     | Non-U.S.<br>citizens |
|---|---------|---|--|-------------------------------|----------|---------------------------|---------------------|----------------------|
|   |         | Black<br>non-<br>Hispanic                 | American<br>Indian/<br>Alaskan<br>Native | Asian/<br>Pacific<br>Islander | Hispanic | White<br>non-<br>Hispanic | Other or<br>unknown |                      |
| Total, all surveyed fields .....            | 280,309 | 8,944                                     | 830                                      | 17,576                        | 8,149    | 158,051                   | 12,035              | 74,724               |
| Total, science and engineering fields ..... | 263,058 | 8,219                                     | 750                                      | 16,461                        | 7,363    | 146,523                   | 11,176              | 72,566               |
| Sciences, total .....                       | 173,681 | 6,258                                     | 570                                      | 9,142                         | 5,163    | 103,362                   | 7,075               | 42,111               |
| Physical sciences .....                     | 24,359  | 526                                       | 59                                       | 1,174                         | 470      | 13,018                    | 722                 | 8,390                |
| Astronomy .....                             | 689     | 6   | 2  | 20                            | 14       | 436                       | 30                  | 181                  |
| Chemistry .....                             | 12,789  | 323                                       | 32                                       | 638                           | 264      | 6,967                     | 366                 | 4,199                |
| Physics .....                               | 10,592  | 187                                       | 25                                       | 506                           | 186      | 5,417                     | 323                 | 3,948                |
| Physical sciences, n.e.c. ....              | 289     | 10  | 0  | 10                            | 6        | 198                       | 3                   | 62                   |
| Earth, atmospheric, & ocean sciences .....  | 10,323  | 117                                       | 31                                       | 261                           | 226      | 7,234                     | 303                 | 2,151                |
| Atmospheric sciences .....                  | 835     | 12  | 3  | 50                            | 8        | 571                       | 11                  | 180                  |
| Geosciences .....                           | 5,300   | 40  | 12                                       | 103                           | 101      | 3,669                     | 165                 | 1,210                |
| Oceanography .....                          | 1,604   | 18  | 6  | 51                            | 52       | 997                       | 28                  | 452                  |
| Earth, atmos., & ocean sci., n.e.c. ....    | 2,584   | 47  | 10                                       | 57                            | 65       | 1,997                     | 99                  | 309                  |
| Mathematical sciences .....                 | 12,248  | 384                                       | 43                                       | 674                           | 243      | 6,211                     | 523                 | 4,170                |
| Computer sciences .....                     | 25,334  | 663                                       | 40                                       | 2,747                         | 498      | 11,697                    | 1,545               | 8,144                |
| Agricultural sciences .....                 | 7,975   | 150                                       | 29                                       | 149                           | 155      | 5,005                     | 235                 | 2,252                |
| Biological sciences .....                   | 29,934  | 689                                       | 93                                       | 2,130                         | 843      | 18,395                    | 974                 | 6,810                |
| Anatomy .....                               | 549     | 15  | 1  | 48                            | 12       | 318                       | 14                  | 141                  |
| Biochemistry .....                          | 3,144   | 50  | 10                                       | 308                           | 63       | 1,677                     | 76                  | 960                  |
| Biology .....                               | 7,362   | 257                                       | 23                                       | 399                           | 305      | 4,923                     | 397                 | 1,058                |
| Biometry/epidemiology .....                 | 1,139   | 42  | 3  | 101                           | 45       | 634                       | 24                  | 290                  |
| Biophysics .....                            | 612     | 15  | 0  | 78                            | 10       | 343                       | 13                  | 153                  |
| Botany .....                                | 1,464   | 11  | 3  | 57                            | 17       | 875                       | 28                  | 473                  |
| Cell biology .....                          | 2,084   | 34  | 5  | 194                           | 57       | 1,259                     | 74                  | 461                  |
| Ecology .....                               | 943     | 7   | 1  | 17                            | 23       | 712                       | 45                  | 138                  |
| Entomology/parasitology .....               | 827     | 4   | 0  | 16                            | 15       | 508                       | 16                  | 268                  |
| Genetics .....                              | 818     | 10  | 1  | 55                            | 21       | 494                       | 21                  | 216                  |
| Microbio., immunology, & virology .....     | 2,604   | 50  | 11                                       | 209                           | 65       | 1,544                     | 54                  | 671                  |
| Nutrition .....                             | 1,287   | 36  | 2  | 60                            | 25       | 620                       | 27                  | 517                  |
| Pathology .....                             | 890     | 7   | 2  | 95                            | 24       | 546                       | 14                  | 202                  |
| Pharmacology .....                          | 1,396   | 37  | 15                                       | 125                           | 32       | 842                       | 39                  | 306                  |
| Physiology .....                            | 1,482   | 31  | 3  | 203                           | 39       | 863                       | 30                  | 313                  |
| Zoology .....                               | 1,204   | 10  | 6  | 36                            | 27       | 950                       | 19                  | 156                  |
| Biosciences, n.e.c. ....                    | 2,129   | 73  | 7  | 129                           | 63       | 1,287                     | 83                  | 487                  |
| Psychology .....                            | 16,101  | 833                                       | 94                                       | 414                           | 747      | 12,186                    | 950                 | 877                  |
| Social sciences .....                       | 47,407  | 2,896                                     | 181                                      | 1,593                         | 1,981    | 29,616                    | 1,823               | 9,317                |
| Agricultural economics .....                | 1,543   | 33  | 3  | 37                            | 33       | 706                       | 47                  | 684                  |
| Anthropology (cultural & social) .....      | 3,138   | 72  | 37                                       | 78                            | 138      | 2,333                     | 121                 | 359                  |
| Economics (except agricultural) .....       | 8,888   | 253                                       | 8  | 369                           | 262      | 3,915                     | 216                 | 3,865                |
| Geography .....                             | 2,807   | 62  | 14                                       | 60                            | 61       | 2,177                     | 108                 | 325                  |
| Linguistics .....                           | 1,194   | 13  | 4  | 59                            | 30       | 630                       | 38                  | 420                  |
| Political science .....                     | 18,395  | 1,480                                     | 66                                       | 599                           | 907      | 12,432                    | 819                 | 2,092                |
| Sociology .....                             | 3,788   | 350                                       | 12                                       | 164                           | 186      | 2,287                     | 156                 | 633                  |
| Sociology/anthropology .....                | 387     | 48  | 4  | 8                             | 11       | 247                       | 17                  | 52                   |
| Social sciences, other .....                | 7,267   | 585                                       | 33                                       | 219                           | 353      | 4,889                     | 301                 | 887                  |
| Engineering, total .....                    | 89,377  | 1,961                                     | 180                                      | 7,319                         | 2,200    | 43,161                    | 4,101               | 30,455               |
| Aerospace engineering .....                 | 2,992   | 42  | 6  | 162                           | 54       | 1,564                     | 73                  | 1,091                |
| Agricultural engineering .....              | 847     | 17  | 0  | 32                            | 16       | 379                       | 17                  | 386                  |
| Biomedical engineering .....                | 1,965   | 30  | 3  | 207                           | 46       | 1,060                     | 48                  | 571                  |
| Chemical engineering .....                  | 5,874   | 85  | 13                                       | 340                           | 133      | 2,716                     | 154                 | 2,433                |
| Civil engineering .....                     | 14,986  | 317                                       | 32                                       | 996                           | 412      | 8,035                     | 532                 | 4,662                |
| Electrical engineering .....                | 26,858  | 639                                       | 47                                       | 3,094                         | 678      | 11,264                    | 1,375               | 9,761                |
| Engineering science .....                   | 1,658   | 28  | 4  | 146                           | 24       | 936                       | 70                  | 450                  |
| Industrial eng./manufacturing eng. ....     | 10,387  | 302                                       | 17                                       | 670                           | 284      | 5,470                     | 856                 | 2,788                |
| Mechanical engineering .....                | 14,690  | 314                                       | 35                                       | 1,059                         | 363      | 7,256                     | 664                 | 4,999                |
| Metallurgical/materials eng. ....           | 3,861   | 52  | 7  | 233                           | 63       | 1,816                     | 84                  | 1,606                |
| Nuclear engineering .....                   | 1,009   | 16  | 1  | 36                            | 16       | 598                       | 3                   | 339                  |
| Engineering, other .....                    | 4,250   | 119                                       | 15                                       | 344                           | 111      | 2,067                     | 225                 | 1,369                |

See explanatory information, if any, and SOURCE at end of table.

**Table 23. Male graduate students in science, engineering, and health fields in all institutions,  
by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**  
**-Continued**

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| Field                                      | Total  | Racial/ethnic background of U.S. citizens |  |                               |          |                           |                     | Non-U.S.<br>citizens |
|--|--------|---|--|-------------------------------|----------|---------------------------|---------------------|----------------------|
|  |        | Black<br>non-<br>Hispanic                 | American<br>Indian/<br>Alaskan<br>Native | Asian/<br>Pacific<br>Islander | Hispanic | White<br>non-<br>Hispanic | Other or<br>unknown |                      |
| Total, health fields .....                 | 17,251 | 725                                       | 80                                       | 1,115                         | 786      | 11,528                    | 859                 | 2,158                |
| Clinical fields .....                      | 1,410  | 35  | 1  | 148                           | 44       | 793                       | 173                 | 216                  |
| Dental sciences .....                      | 819    | 12  | 3  | 64                            | 42       | 521                       | 16                  | 161                  |
| Nursing .....                              | 1,699  | 50  | 15                                       | 51                            | 93       | 1,392                     | 58                  | 40                   |
| Pharmaceutical sciences .....              | 1,602  | 47  | 2  | 116                           | 47       | 696                       | 67                  | 627                  |
| Preventive medicine/community health ..... | 4,263  | 276                                       | 31                                       | 339                           | 247      | 2,667                     | 242                 | 461                  |
| Speech pathology/audiology .....           | 984    | 56  | 11                                       | 24                            | 25       | 731                       | 44                  | 93                   |
| Veterinary sciences .....                  | 490    | 16  | 0  | 25                            | 12       | 285                       | 2                   | 150                  |
| Other health fields .....                  | 5,984  | 233                                       | 17                                       | 348                           | 276      | 4,443                     | 257                 | 410                  |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 24. Female graduate students in science, engineering, and health fields in all institutions,  
by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**

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| Field                                       | Total   | Racial/ethnic background of U.S. citizens |  |                               |          |                           |                     | Non-U.S.<br>citizens |
|---|---------|---|--|-------------------------------|----------|---------------------------|---------------------|----------------------|
|   |         | Black<br>non-<br>Hispanic                 | American<br>Indian/<br>Alaskan<br>Native | Asian/<br>Pacific<br>Islander | Hispanic | White<br>non-<br>Hispanic | Other or<br>unknown |                      |
| Total, all surveyed fields .....            | 221,201 | 13,308                                    | 1,036                                    | 11,915                        | 9,065    | 147,513                   | 9,865               | 28,499               |
| Total, science and engineering fields ..... | 160,864 | 10,147                                    | 774                                      | 9,554                         | 6,726    | 100,253                   | 7,189               | 26,221               |
| Sciences, total .....                       | 142,712 | 9,236                                     | 723                                      | 7,755                         | 6,095    | 91,301                    | 6,413               | 21,189               |
| Physical sciences .....                     | 9,111   | 368                                       | 19                                       | 623                           | 262      | 4,488                     | 299                 | 3,052                |
| Astronomy .....                             | 223     | 5   | 1  | 10                            | 2        | 141                       | 13                  | 51                   |
| Chemistry .....                             | 6,856   | 298                                       | 13                                       | 483                           | 222      | 3,356                     | 219                 | 2,265                |
| Physics .....                               | 1,835   | 61  | 5  | 123                           | 33       | 833                       | 65                  | 715                  |
| Physical sciences, n.e.c. ....              | 197     | 4   | 0  | 7                             | 5        | 158                       | 2                   | 21                   |
| Earth, atmospheric, & ocean sciences .....  | 5,479   | 103                                       | 22                                       | 162                           | 143      | 4,090                     | 174                 | 785                  |
| Atmospheric sciences .....                  | 237     | 6   | 1  | 19                            | 2        | 120                       | 3                   | 86                   |
| Geosciences .....                           | 2,302   | 27  | 15                                       | 48                            | 53       | 1,733                     | 93                  | 333                  |
| Oceanography .....                          | 1,099   | 16  | 2  | 32                            | 45       | 814                       | 21                  | 169                  |
| Earth, atmos., & ocean sci., n.e.c. ....    | 1,841   | 54  | 4  | 63                            | 43       | 1,423                     | 57                  | 197                  |
| Mathematical sciences .....                 | 6,261   | 306                                       | 27                                       | 450                           | 157      | 3,419                     | 251                 | 1,651                |
| Computer sciences .....                     | 8,175   | 526                                       | 15                                       | 1,356                         | 162      | 3,098                     | 449                 | 2,569                |
| Agricultural sciences .....                 | 4,451   | 143                                       | 29                                       | 124                           | 134      | 3,008                     | 143                 | 870                  |
| Biological sciences .....                   | 28,819  | 1,190                                     | 121                                      | 2,117                         | 967      | 18,094                    | 842                 | 5,488                |
| Anatomy .....                               | 507     | 26  | 0  | 51                            | 16       | 294                       | 9                   | 111                  |
| Biochemistry .....                          | 2,406   | 61  | 6  | 270                           | 59       | 1,217                     | 45                  | 748                  |
| Biology .....                               | 6,849   | 386                                       | 40                                       | 438                           | 303      | 4,424                     | 332                 | 926                  |
| Biometry/epidemiology .....                 | 1,673   | 96  | 10                                       | 151                           | 71       | 1,012                     | 42                  | 291                  |
| Biophysics .....                            | 243     | 6   | 2  | 35                            | 4        | 134                       | 1                   | 61                   |
| Botany .....                                | 1,145   | 24  | 3  | 34                            | 24       | 725                       | 24                  | 311                  |
| Cell biology .....                          | 1,775   | 38  | 7  | 130                           | 53       | 1,131                     | 48                  | 368                  |
| Ecology .....                               | 774     | 8   | 6  | 15                            | 20       | 637                       | 27                  | 61                   |
| Entomology/parasitology .....               | 414     | 8   | 1  | 19                            | 11       | 263                       | 7                   | 105                  |
| Genetics .....                              | 882     | 26  | 0  | 57                            | 18       | 629                       | 15                  | 137                  |
| Microbio., immunology, & virology .....     | 2,491   | 100                                       | 5  | 200                           | 102      | 1,503                     | 50                  | 531                  |
| Nutrition .....                             | 3,725   | 151                                       | 15                                       | 210                           | 113      | 2,415                     | 85                  | 736                  |
| Pathology .....                             | 780     | 21  | 1  | 67                            | 15       | 525                       | 11                  | 140                  |
| Pharmacology .....                          | 1,307   | 64  | 11                                       | 132                           | 41       | 765                       | 33                  | 261                  |
| Physiology .....                            | 1,058   | 68  | 3  | 118                           | 36       | 598                       | 20                  | 215                  |
| Zoology .....                               | 869     | 15  | 5  | 27                            | 21       | 688                       | 16                  | 97                   |
| Biosciences, n.e.c. ....                    | 1,921   | 92  | 6  | 163                           | 60       | 1,134                     | 77                  | 389                  |
| Psychology .....                            | 38,142  | 2,589                                     | 237                                      | 1,182                         | 2,030    | 28,493                    | 2,371               | 1,240                |
| Social sciences .....                       | 42,274  | 4,011                                     | 253                                      | 1,741                         | 2,240    | 26,611                    | 1,884               | 5,534                |
| Agricultural economics .....                | 778     | 31  | 2  | 25                            | 22       | 362                       | 20                  | 316                  |
| Anthropology (cultural & social) .....      | 4,556   | 143                                       | 66                                       | 130                           | 205      | 3,479                     | 192                 | 341                  |
| Economics (except agricultural) .....       | 3,902   | 149                                       | 13                                       | 212                           | 103      | 1,699                     | 97                  | 1,629                |
| Geography .....                             | 1,595   | 41  | 9  | 67                            | 39       | 1,202                     | 62                  | 175                  |
| Linguistics .....                           | 2,000   | 38  | 5  | 120                           | 108      | 1,058                     | 94                  | 577                  |
| Political science .....                     | 15,979  | 2,079                                     | 71                                       | 628                           | 1,019    | 10,004                    | 879                 | 1,299                |
| Sociology .....                             | 5,787   | 606                                       | 37                                       | 248                           | 322      | 3,788                     | 203                 | 583                  |
| Sociology/anthropology .....                | 554     | 91  | 5  | 13                            | 13       | 356                       | 40                  | 36                   |
| Social sciences, other .....                | 7,123   | 833                                       | 45                                       | 298                           | 409      | 4,663                     | 297                 | 578                  |
| Engineering, total .....                    | 18,152  | 911                                       | 51                                       | 1,799                         | 631      | 8,952                     | 776                 | 5,032                |
| Aerospace engineering .....                 | 351     | 9   | 2  | 15                            | 11       | 210                       | 9                   | 95                   |
| Agricultural engineering .....              | 207     | 8   | 1  | 12                            | 2        | 82                        | 1                   | 101                  |
| Biomedical engineering .....                | 722     | 42  | 1  | 74                            | 12       | 405                       | 25                  | 163                  |
| Chemical engineering .....                  | 1,558   | 89  | 8  | 121                           | 69       | 702                       | 52                  | 517                  |
| Civil engineering .....                     | 4,232   | 157                                       | 10                                       | 364                           | 178      | 2,425                     | 160                 | 938                  |
| Electrical engineering .....                | 4,202   | 192                                       | 5  | 668                           | 116      | 1,487                     | 187                 | 1,547                |
| Engineering science .....                   | 297     | 9   | 1  | 39                            | 7        | 166                       | 6                   | 69                   |
| Industrial eng./manufacturing eng. ....     | 2,795   | 223                                       | 6  | 159                           | 108      | 1,614                     | 156                 | 529                  |
| Mechanical engineering .....                | 1,670   | 89  | 9  | 184                           | 57       | 803                       | 85                  | 443                  |
| Metallurgical/materials eng. ....           | 1,059   | 34  | 1  | 74                            | 39       | 561                       | 23                  | 327                  |
| Nuclear engineering .....                   | 145     | 7   | 1  | 10                            | 5        | 74                        | 3                   | 45                   |
| Engineering, other .....                    | 914     | 52  | 6  | 79                            | 27       | 423                       | 69                  | 258                  |

See explanatory information, if any, and SOURCE at end of table.

**Table 24. Female graduate students in science, engineering, and health fields in all institutions,  
by field and citizenship, and by racial/ethnic background of U.S. citizens: 1995**  
**-Continued**

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| Field                                      | Total  | Racial/ethnic background of U.S. citizens |  |                               |          |                           |                     | Non-U.S.<br>citizens |
|--|--------|---|--|-------------------------------|----------|---------------------------|---------------------|----------------------|
|  |        | Black<br>non-<br>Hispanic                 | American<br>Indian/<br>Alaskan<br>Native | Asian/<br>Pacific<br>Islander | Hispanic | White<br>non-<br>Hispanic | Other or<br>unknown |                      |
| Total, health fields .....                 | 60,337 | 3,161                                     | 262                                      | 2,361                         | 2,339    | 47,260                    | 2,676               | 2,278                |
| Clinical fields .....                      | 1,818  | 80  | 6  | 158                           | 47       | 1,180                     | 186                 | 161                  |
| Dental sciences .....                      | 432    | 18  | 0  | 36                            | 30       | 249                       | 8                   | 91                   |
| Nursing .....                              | 26,742 | 1,488                                     | 128                                      | 742                           | 800      | 22,144                    | 1,072               | 368                  |
| Pharmaceutical sciences .....              | 1,346  | 79  | 2  | 130                           | 53       | 588                       | 45                  | 449                  |
| Preventive medicine/community health ..... | 6,750  | 568                                       | 31                                       | 562                           | 564      | 4,219                     | 315                 | 491                  |
| Speech pathology/audiology .....           | 11,114 | 417                                       | 46                                       | 187                           | 341      | 9,431                     | 453                 | 239                  |
| Veterinary sciences .....                  | 439    | 21  | 2  | 17                            | 15       | 284                       | 1                   | 99                   |
| Other health fields .....                  | 11,696 | 490                                       | 47                                       | 529                           | 489      | 9,165                     | 596                 | 380                  |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support                | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Total, all surveyed fields:</b>               |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 275,204 | 282,741 | 292,854 | 307,049 | 322,753 | 329,876 | 332,453 | 330,235 |
| Federal, total .....                             | 55,492  | 57,444  | 59,274  | 63,017  | 65,634  | 67,697  | 68,583  | 67,469  |
| Dept. of Defense .....                           | 9,546   | 9,140   | 8,868   | 9,128   | 9,247   | 9,750   | 9,449   | 9,421   |
| Dept. of HHS, total .....                        | 17,901  | 18,692  | 19,522  | 20,493  | 21,429  | 22,039  | 22,690  | 22,753  |
| NIH .....  | 13,715  | 14,357  | 14,996  | 16,018  | 17,094  | 18,138  | 18,305  | 18,115  |
| Other HHS .....                                  | 4,186   | 4,335   | 4,526   | 4,475   | 4,335   | 3,901   | 4,385   | 4,638   |
| NSF .....  | 11,634  | 11,900  | 12,025  | 12,666  | 13,368  | 13,532  | 13,983  | 13,665  |
| USDA .....                                       | 2,591   | 2,728   | 2,722   | 3,075   | 3,216   | 3,324   | 3,422   | 3,244   |
| All other Federal .....                          | 13,820  | 14,984  | 16,137  | 17,655  | 18,374  | 19,052  | 19,039  | 18,386  |
| Institutional support .....                      | 114,768 | 119,165 | 123,056 | 125,387 | 127,968 | 129,089 | 129,419 | 129,903 |
| Other outside support, total .....               | 25,741  | 25,851  | 26,136  | 27,070  | 27,776  | 26,716  | 27,295  | 26,114  |
| All other U.S. .....                             | 18,740  | 19,141  | 19,605  | 20,427  | 21,312  | 21,230  | 21,564  | 20,564  |
| Foreign .....                                    | 7,001   | 6,710   | 6,531   | 6,643   | 6,464   | 5,486   | 5,731   | 5,550   |
| Self-support .....                               | 79,203  | 80,281  | 84,388  | 91,575  | 101,375 | 106,374 | 107,156 | 106,749 |
| <b>Total, science and engineering:</b>           |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 250,667 | 256,928 | 265,423 | 277,183 | 290,654 | 294,227 | 293,324 | 288,016 |
| Federal, total .....                             | 49,171  | 50,969  | 52,503  | 56,049  | 58,306  | 60,402  | 60,805  | 59,468  |
| Dept. of Defense .....                           | 9,301   | 8,773   | 8,492   | 8,711   | 8,848   | 9,315   | 9,067   | 9,039   |
| Dept. of HHS, total .....                        | 13,297  | 14,078  | 14,594  | 15,472  | 16,275  | 16,828  | 17,158  | 17,069  |
| NIH .....  | 12,307  | 12,909  | 13,367  | 14,172  | 15,044  | 15,872  | 15,960  | 15,662  |
| Other HHS .....                                  | 990     | 1,169   | 1,227   | 1,300   | 1,231   | 956     | 1,198   | 1,407   |
| NSF .....  | 11,585  | 11,852  | 11,976  | 12,610  | 13,298  | 13,443  | 13,866  | 13,566  |
| USDA .....                                       | 2,560   | 2,682   | 2,664   | 3,015   | 3,147   | 3,246   | 3,348   | 3,189   |
| All other Federal .....                          | 12,428  | 13,584  | 14,777  | 16,241  | 16,738  | 17,570  | 17,366  | 16,605  |
| Institutional support .....                      | 108,582 | 112,339 | 115,885 | 117,907 | 120,321 | 120,969 | 120,942 | 120,833 |
| Other outside support, total .....               | 24,464  | 24,445  | 24,766  | 25,549  | 26,082  | 24,973  | 25,418  | 24,045  |
| All other U.S. .....                             | 17,859  | 18,215  | 18,700  | 19,367  | 20,078  | 19,930  | 20,145  | 19,026  |
| Foreign .....                                    | 6,605   | 6,230   | 6,066   | 6,182   | 6,004   | 5,043   | 5,273   | 5,019   |
| Self-support .....                               | 68,450  | 69,175  | 72,269  | 77,678  | 85,945  | 87,883  | 86,159  | 83,670  |
| <b>Sciences, total:</b>                          |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 187,660 | 192,553 | 199,446 | 206,149 | 216,228 | 220,400 | 221,756 | 220,154 |
| Federal, total .....                             | 35,183  | 36,755  | 37,831  | 40,067  | 41,742  | 43,512  | 43,954  | 43,145  |
| Dept. of Defense .....                           | 4,309   | 3,946   | 3,779   | 3,840   | 3,895   | 4,176   | 4,350   | 4,232   |
| Dept. of HHS, total .....                        | 12,696  | 13,379  | 13,834  | 14,662  | 15,374  | 15,904  | 16,252  | 16,151  |
| NIH .....  | 11,776  | 12,291  | 12,706  | 13,448  | 14,246  | 15,078  | 15,178  | 14,894  |
| Other HHS .....                                  | 920     | 1,088   | 1,128   | 1,214   | 1,128   | 826     | 1,074   | 1,257   |
| NSF .....  | 7,782   | 8,087   | 8,094   | 8,313   | 8,693   | 8,882   | 9,102   | 8,955   |
| USDA .....                                       | 2,369   | 2,478   | 2,433   | 2,741   | 2,789   | 2,940   | 3,003   | 2,847   |
| All other Federal .....                          | 8,027   | 8,865   | 9,691   | 10,511  | 10,991  | 11,610  | 11,247  | 10,960  |
| Institutional support .....                      | 87,000  | 89,558  | 92,574  | 93,291  | 95,395  | 95,995  | 96,375  | 96,989  |
| Other outside support, total .....               | 14,376  | 14,363  | 14,385  | 14,923  | 15,532  | 15,256  | 16,040  | 14,924  |
| All other U.S. .....                             | 9,821   | 10,205  | 10,325  | 10,831  | 11,559  | 11,857  | 12,379  | 11,549  |
| Foreign .....                                    | 4,555   | 4,158   | 4,060   | 4,092   | 3,973   | 3,399   | 3,661   | 3,375   |
| Self-support .....                               | 51,101  | 51,877  | 54,656  | 57,868  | 63,559  | 65,637  | 65,387  | 65,096  |
| <b>Physical sciences:</b>                        |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 28,574  | 29,207  | 29,485  | 30,117  | 30,673  | 30,611  | 30,043  | 28,892  |
| Federal, total .....                             | 9,857   | 10,247  | 10,284  | 10,834  | 11,007  | 11,140  | 11,032  | 10,353  |
| Dept. of Defense .....                           | 1,475   | 1,392   | 1,214   | 1,226   | 1,194   | 1,187   | 1,316   | 1,197   |
| Dept. of HHS, total .....                        | 2,152   | 2,111   | 2,096   | 2,042   | 2,188   | 2,162   | 2,209   | 2,041   |
| NIH .....  | 2,002   | 1,981   | 1,952   | 1,874   | 2,056   | 2,051   | 2,074   | 1,861   |
| Other HHS .....                                  | 150     | 130     | 144     | 168     | 132     | 111     | 135     | 180     |
| NSF .....  | 3,656   | 3,612   | 3,567   | 3,571   | 3,601   | 3,623   | 3,703   | 3,583   |
| USDA .....                                       | 32      | 43      | 54      | 61      | 68      | 61      | 42      | 38      |
| All other Federal .....                          | 2,542   | 3,089   | 3,353   | 3,934   | 3,956   | 4,107   | 3,762   | 3,494   |
| Institutional support .....                      | 14,860  | 15,150  | 15,272  | 15,049  | 15,358  | 15,148  | 14,831  | 14,858  |
| Other outside support, total .....               | 1,980   | 2,007   | 1,974   | 2,228   | 2,349   | 2,234   | 2,316   | 2,079   |
| All other U.S. .....                             | 1,662   | 1,751   | 1,716   | 1,927   | 2,044   | 1,955   | 2,008   | 1,792   |
| Foreign .....                                    | 318     | 256     | 258     | 301     | 305     | 279     | 308     | 287     |
| Self-support .....                               | 1,877   | 1,803   | 1,955   | 2,006   | 1,959   | 2,089   | 1,864   | 1,602   |
| <b>Earth, atmospheric, &amp; ocean sciences:</b> |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 10,192  | 10,021  | 10,244  | 10,373  | 10,986  | 11,367  | 11,470  | 11,290  |
| Federal, total .....                             | 2,789   | 2,895   | 2,991   | 3,119   | 3,436   | 3,652   | 3,630   | 3,489   |
| Dept. of Defense .....                           | 461     | 435     | 452     | 452     | 472     | 517     | 494     | 421     |
| Dept. of HHS, total .....                        | 51      | 25      | 34      | 56      | 49      | 48      | 37      | 34      |
| NIH .....  | 19      | 17      | 21      | 23      | 43      | 41      | 36      | 31      |
| Other HHS .....                                  | 32      | 8       | 13      | 33      | 6       | 7       | 1       | 3       |
| NSF .....  | 1,236   | 1,253   | 1,210   | 1,223   | 1,320   | 1,366   | 1,409   | 1,387   |
| USDA .....                                       | 40      | 43      | 57      | 69      | 86      | 64      | 61      | 65      |
| All other Federal .....                          | 1,001   | 1,139   | 1,238   | 1,319   | 1,509   | 1,657   | 1,629   | 1,582   |
| Institutional support .....                      | 4,285   | 4,256   | 4,257   | 4,314   | 4,316   | 4,366   | 4,343   | 4,445   |
| Other outside support, total .....               | 1,025   | 990     | 952     | 974     | 1,006   | 928     | 1,023   | 991     |
| All other U.S. .....                             | 669     | 652     | 679     | 687     | 761     | 735     | 790     | 756     |
| Foreign .....                                    | 356     | 338     | 273     | 287     | 245     | 193     | 233     | 235     |
| Self-support .....                               | 2,093   | 1,880   | 2,044   | 1,966   | 2,228   | 2,421   | 2,474   | 2,365   |

See explanatory information, if any, and SOURCE at end of table.

**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mathematical sciences:</b>      |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 13,512 | 13,681 | 13,865 | 14,256 | 14,679 | 14,530 | 14,226 | 13,422 |
| Federal, total .....               | 1,189  | 1,219  | 1,333  | 1,503  | 1,497  | 1,474  | 1,397  | 1,291  |
| Dept. of Defense .....             | 513    | 395    | 367    | 376    | 386    | 399    | 372    | 322    |
| Dept. of HHS, total .....          | 28     | 36     | 49     | 69     | 118    | 80     | 76     | 87     |
| NIH .....                          | 25     | 28     | 39     | 64     | 111    | 74     | 68     | 63     |
| Other HHS .....                    | 3      | 8      | 10     | 5      | 7      | 6      | 8      | 24     |
| NSF .....                          | 463    | 475    | 491    | 452    | 457    | 470    | 510    | 474    |
| USDA .....                         | 20     | 22     | 23     | 21     | 25     | 28     | 16     | 13     |
| All other Federal .....            | 165    | 291    | 403    | 585    | 511    | 497    | 423    | 395    |
| Institutional support .....        | 9,131  | 9,373  | 9,489  | 9,531  | 9,578  | 9,394  | 9,461  | 9,169  |
| Other outside support, total ..... | 616    | 585    | 560    | 590    | 626    | 524    | 552    | 478    |
| All other U.S. ....                | 350    | 348    | 317    | 321    | 356    | 303    | 333    | 291    |
| Foreign .....                      | 266    | 237    | 243    | 269    | 270    | 221    | 219    | 187    |
| Self-support .....                 | 2,576  | 2,504  | 2,483  | 2,632  | 2,978  | 3,138  | 2,816  | 2,484  |
| <b>Computer sciences:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 15,133 | 15,606 | 16,689 | 16,516 | 17,506 | 17,399 | 16,712 | 16,564 |
| Federal, total .....               | 2,219  | 2,324  | 2,409  | 2,533  | 2,661  | 2,918  | 3,070  | 3,175  |
| Dept. of Defense .....             | 1,214  | 1,164  | 1,129  | 1,131  | 1,210  | 1,327  | 1,345  | 1,443  |
| Dept. of HHS, total .....          | 64     | 60     | 71     | 71     | 104    | 107    | 103    | 111    |
| NIH .....                          | 64     | 53     | 62     | 65     | 101    | 99     | 95     | 93     |
| Other HHS .....                    | 0      | 7      | 9      | 6      | 3      | 8      | 8      | 18     |
| NSF .....                          | 632    | 777    | 819    | 896    | 962    | 1,004  | 1,046  | 1,051  |
| USDA .....                         | 10     | 7      | 14     | 8      | 6      | 7      | 9      | 13     |
| All other Federal .....            | 299    | 316    | 376    | 427    | 379    | 473    | 567    | 557    |
| Institutional support .....        | 5,131  | 5,342  | 5,653  | 5,474  | 5,609  | 5,509  | 5,437  | 5,492  |
| Other outside support, total ..... | 1,312  | 1,278  | 1,281  | 1,322  | 1,356  | 1,391  | 1,403  | 1,309  |
| All other U.S. ....                | 987    | 950    | 935    | 972    | 1,031  | 1,134  | 1,110  | 1,065  |
| Foreign .....                      | 325    | 328    | 346    | 350    | 325    | 257    | 293    | 244    |
| Self-support .....                 | 6,471  | 6,662  | 7,346  | 7,187  | 7,880  | 7,581  | 6,802  | 6,588  |
| <b>Agricultural sciences:</b>      |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 9,122  | 9,070  | 9,100  | 9,289  | 9,452  | 9,468  | 9,492  | 9,630  |
| Federal, total .....               | 1,785  | 1,817  | 1,812  | 1,896  | 1,993  | 1,965  | 1,922  | 2,048  |
| Dept. of Defense .....             | 32     | 13     | 18     | 26     | 18     | 37     | 35     | 32     |
| Dept. of HHS, total .....          | 34     | 37     | 45     | 46     | 41     | 34     | 50     | 27     |
| NIH .....                          | 33     | 26     | 40     | 38     | 38     | 32     | 47     | 21     |
| Other HHS .....                    | 1      | 11     | 5      | 8      | 3      | 2      | 3      | 6      |
| NSF .....                          | 50     | 48     | 65     | 61     | 76     | 76     | 87     | 88     |
| USDA .....                         | 959    | 1,064  | 963    | 1,117  | 1,110  | 1,150  | 1,114  | 1,192  |
| All other Federal .....            | 710    | 655    | 721    | 646    | 748    | 668    | 636    | 709    |
| Institutional support .....        | 3,481  | 3,463  | 3,450  | 3,535  | 3,621  | 3,635  | 3,810  | 3,882  |
| Other outside support, total ..... | 1,773  | 1,697  | 1,770  | 1,715  | 1,685  | 1,681  | 1,671  | 1,489  |
| All other U.S. ....                | 951    | 1,026  | 1,101  | 1,059  | 1,099  | 1,189  | 1,153  | 1,090  |
| Foreign .....                      | 822    | 671    | 669    | 656    | 586    | 492    | 518    | 399    |
| Self-support .....                 | 2,083  | 2,093  | 2,068  | 2,143  | 2,153  | 2,187  | 2,089  | 2,211  |
| <b>Biological sciences:</b>        |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 39,209 | 40,348 | 40,945 | 42,700 | 44,389 | 46,481 | 48,017 | 48,283 |
| Federal, total .....               | 12,468 | 13,259 | 13,652 | 14,503 | 15,148 | 16,210 | 16,724 | 16,593 |
| Dept. of Defense .....             | 282    | 250    | 222    | 223    | 232    | 273    | 346    | 357    |
| Dept. of HHS, total .....          | 8,930  | 9,618  | 9,951  | 10,667 | 11,054 | 11,632 | 11,979 | 12,048 |
| NIH .....                          | 8,663  | 9,265  | 9,584  | 10,215 | 10,637 | 11,314 | 11,464 | 11,390 |
| Other HHS .....                    | 267    | 353    | 367    | 452    | 417    | 318    | 515    | 658    |
| NSF .....                          | 1,121  | 1,253  | 1,212  | 1,282  | 1,347  | 1,382  | 1,382  | 1,406  |
| USDA .....                         | 986    | 949    | 963    | 1,062  | 1,083  | 1,222  | 1,289  | 1,083  |
| All other Federal .....            | 1,149  | 1,189  | 1,304  | 1,269  | 1,432  | 1,701  | 1,728  | 1,699  |
| Institutional support .....        | 17,921 | 18,446 | 18,868 | 19,267 | 19,753 | 20,028 | 20,712 | 20,805 |
| Other outside support, total ..... | 3,385  | 3,433  | 3,536  | 3,735  | 3,787  | 3,864  | 4,138  | 3,923  |
| All other U.S. ....                | 2,558  | 2,636  | 2,809  | 3,017  | 3,109  | 3,280  | 3,504  | 3,317  |
| Foreign .....                      | 827    | 797    | 727    | 718    | 678    | 584    | 634    | 606    |
| Self-support .....                 | 5,435  | 5,210  | 4,889  | 5,195  | 5,701  | 6,379  | 6,443  | 6,962  |
| <b>Psychology:</b>                 |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 28,118 | 29,348 | 30,619 | 32,258 | 34,277 | 34,894 | 35,434 | 35,762 |
| Federal, total .....               | 2,166  | 2,207  | 2,394  | 2,492  | 2,587  | 2,658  | 2,646  | 2,576  |
| Dept. of Defense .....             | 153    | 113    | 156    | 159    | 136    | 163    | 175    | 175    |
| Dept. of HHS, total .....          | 1,120  | 1,179  | 1,274  | 1,342  | 1,399  | 1,424  | 1,375  | 1,324  |
| NIH .....                          | 763    | 720    | 798    | 901    | 963    | 1,164  | 1,108  | 1,109  |
| Other HHS .....                    | 357    | 459    | 476    | 441    | 436    | 260    | 267    | 215    |
| NSF .....                          | 233    | 236    | 262    | 268    | 285    | 316    | 290    | 288    |
| USDA .....                         | 25     | 29     | 37     | 24     | 19     | 15     | 38     | 16     |
| All other Federal .....            | 635    | 650    | 665    | 699    | 748    | 740    | 768    | 773    |
| Institutional support .....        | 11,181 | 11,631 | 12,134 | 12,279 | 12,721 | 13,261 | 13,021 | 13,091 |
| Other outside support, total ..... | 1,051  | 1,132  | 1,118  | 1,071  | 1,109  | 1,073  | 1,202  | 1,144  |
| All other U.S. ....                | 987    | 1,077  | 1,060  | 1,015  | 1,052  | 1,026  | 1,128  | 1,101  |
| Foreign .....                      | 64     | 55     | 58     | 56     | 57     | 47     | 74     | 43     |
| Self-support .....                 | 13,720 | 14,378 | 14,973 | 16,416 | 17,860 | 17,902 | 18,565 | 18,951 |

See explanatory information, if any, and SOURCE at end of table.

**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Social sciences:</b>            |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 43,800 | 45,272 | 48,499 | 50,640 | 54,266 | 55,650 | 56,362 | 56,311 |
| Federal, total .....               | 2,710  | 2,787  | 2,956  | 3,187  | 3,413  | 3,495  | 3,533  | 3,620  |
| Dept. of Defense .....             | 179    | 184    | 221    | 247    | 247    | 273    | 267    | 285    |
| Dept. of HHS, total .....          | 317    | 313    | 314    | 369    | 421    | 417    | 423    | 479    |
| NIH .....                          | 207    | 201    | 210    | 268    | 297    | 303    | 286    | 326    |
| Other HHS .....                    | 110    | 112    | 104    | 101    | 124    | 114    | 137    | 153    |
| NSF .....                          | 391    | 433    | 468    | 560    | 645    | 645    | 675    | 678    |
| USDA .....                         | 297    | 321    | 322    | 379    | 392    | 393    | 434    | 427    |
| All other Federal .....            | 1,526  | 1,536  | 1,631  | 1,632  | 1,708  | 1,767  | 1,734  | 1,751  |
| Institutional support .....        | 21,010 | 21,897 | 23,451 | 23,842 | 24,439 | 24,654 | 24,760 | 25,247 |
| Other outside support, total ..... | 3,234  | 3,241  | 3,194  | 3,288  | 3,614  | 3,561  | 3,735  | 3,511  |
| All other U.S. ....                | 1,657  | 1,765  | 1,708  | 1,833  | 2,107  | 2,235  | 2,353  | 2,137  |
| Foreign .....                      | 1,577  | 1,476  | 1,486  | 1,455  | 1,507  | 1,326  | 1,382  | 1,374  |
| Self-support .....                 | 16,846 | 17,347 | 18,898 | 20,323 | 22,800 | 23,940 | 24,334 | 23,933 |
| <b>Engineering, total:</b>         |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 63,007 | 64,375 | 65,977 | 71,034 | 74,426 | 73,827 | 71,568 | 67,862 |
| Federal, total .....               | 13,988 | 14,214 | 14,672 | 15,982 | 16,564 | 16,890 | 16,851 | 16,323 |
| Dept. of Defense .....             | 4,992  | 4,827  | 4,713  | 4,871  | 4,953  | 5,139  | 4,717  | 4,807  |
| Dept. of HHS, total .....          | 601    | 699    | 760    | 810    | 901    | 924    | 906    | 918    |
| NIH .....                          | 531    | 618    | 661    | 724    | 798    | 794    | 782    | 768    |
| Other HHS .....                    | 70     | 81     | 99     | 86     | 103    | 130    | 124    | 150    |
| NSF .....                          | 3,803  | 3,765  | 3,882  | 4,297  | 4,605  | 4,561  | 4,764  | 4,611  |
| USDA .....                         | 191    | 204    | 231    | 274    | 358    | 306    | 345    | 342    |
| All other Federal .....            | 4,401  | 4,719  | 5,086  | 5,730  | 5,747  | 5,960  | 6,119  | 5,645  |
| Institutional support .....        | 21,582 | 22,781 | 23,311 | 24,616 | 24,926 | 24,974 | 24,567 | 23,844 |
| Other outside support, total ..... | 10,088 | 10,082 | 10,381 | 10,626 | 10,550 | 9,717  | 9,378  | 9,121  |
| All other U.S. ....                | 8,038  | 8,010  | 8,375  | 8,536  | 8,519  | 8,073  | 7,766  | 7,477  |
| Foreign .....                      | 2,050  | 2,072  | 2,006  | 2,090  | 2,031  | 1,644  | 1,612  | 1,644  |
| Self-support .....                 | 17,349 | 17,298 | 17,613 | 19,810 | 22,386 | 22,246 | 20,772 | 18,574 |
| <b>Chemical engineering:</b>       |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 5,359  | 5,282  | 5,443  | 5,788  | 5,946  | 6,041  | 6,105  | 5,962  |
| Federal, total .....               | 1,452  | 1,459  | 1,529  | 1,598  | 1,654  | 1,748  | 1,716  | 1,754  |
| Dept. of Defense .....             | 145    | 130    | 98     | 134    | 123    | 139    | 128    | 164    |
| Dept. of HHS, total .....          | 83     | 87     | 121    | 132    | 166    | 141    | 173    | 163    |
| NIH .....                          | 79     | 87     | 119    | 128    | 146    | 119    | 143    | 136    |
| Other HHS .....                    | 4      | 0      | 2      | 4      | 20     | 22     | 30     | 27     |
| NSF .....                          | 683    | 654    | 679    | 664    | 699    | 730    | 749    | 761    |
| USDA .....                         | 7      | 13     | 27     | 16     | 38     | 52     | 54     | 66     |
| All other Federal .....            | 534    | 575    | 604    | 652    | 628    | 686    | 612    | 600    |
| Institutional support .....        | 2,021  | 1,976  | 2,105  | 2,282  | 2,308  | 2,340  | 2,420  | 2,262  |
| Other outside support, total ..... | 1,279  | 1,278  | 1,241  | 1,228  | 1,170  | 1,059  | 1,145  | 1,105  |
| All other U.S. ....                | 1,166  | 1,184  | 1,142  | 1,111  | 1,072  | 960    | 1,041  | 967    |
| Foreign .....                      | 113    | 94     | 99     | 117    | 98     | 99     | 104    | 138    |
| Self-support .....                 | 607    | 569    | 568    | 680    | 814    | 894    | 824    | 841    |
| <b>Civil engineering:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 9,946  | 9,964  | 10,128 | 11,328 | 12,454 | 12,458 | 12,641 | 12,248 |
| Federal, total .....               | 1,512  | 1,403  | 1,467  | 1,752  | 2,028  | 1,982  | 2,090  | 1,970  |
| Dept. of Defense .....             | 327    | 280    | 235    | 273    | 349    | 328    | 321    | 290    |
| Dept. of HHS, total .....          | 5      | 18     | 15     | 35     | 43     | 38     | 45     | 41     |
| NIH .....                          | 3      | 16     | 11     | 31     | 38     | 30     | 37     | 31     |
| Other HHS .....                    | 2      | 2      | 4      | 4      | 5      | 8      | 8      | 10     |
| NSF .....                          | 420    | 382    | 428    | 498    | 532    | 522    | 587    | 530    |
| USDA .....                         | 37     | 33     | 36     | 51     | 80     | 63     | 65     | 53     |
| All other Federal .....            | 723    | 690    | 753    | 895    | 1,024  | 1,031  | 1,072  | 1,056  |
| Institutional support .....        | 3,844  | 3,904  | 3,913  | 4,204  | 4,391  | 4,579  | 4,742  | 4,861  |
| Other outside support, total ..... | 1,108  | 1,200  | 1,256  | 1,339  | 1,477  | 1,267  | 1,233  | 1,180  |
| All other U.S. ....                | 695    | 723    | 826    | 918    | 1,031  | 972    | 942    | 892    |
| Foreign .....                      | 413    | 477    | 430    | 421    | 446    | 295    | 291    | 288    |
| Self-support .....                 | 3,482  | 3,457  | 3,492  | 4,033  | 4,558  | 4,630  | 4,576  | 4,237  |
| <b>Electrical engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 17,706 | 18,466 | 18,675 | 19,904 | 20,996 | 20,400 | 19,414 | 18,303 |
| Federal, total .....               | 3,467  | 3,476  | 3,571  | 3,866  | 4,061  | 4,106  | 4,082  | 4,085  |
| Dept. of Defense .....             | 1,687  | 1,675  | 1,646  | 1,644  | 1,700  | 1,764  | 1,664  | 1,706  |
| Dept. of HHS, total .....          | 97     | 61     | 77     | 85     | 90     | 103    | 100    | 113    |
| NIH .....                          | 75     | 45     | 55     | 76     | 81     | 86     | 83     | 84     |
| Other HHS .....                    | 22     | 16     | 22     | 9      | 9      | 17     | 17     | 29     |
| NSF .....                          | 1,135  | 1,084  | 1,133  | 1,278  | 1,388  | 1,285  | 1,343  | 1,353  |
| USDA .....                         | 11     | 14     | 16     | 18     | 24     | 11     | 24     | 34     |
| All other Federal .....            | 537    | 642    | 699    | 841    | 859    | 943    | 951    | 879    |
| Institutional support .....        | 5,724  | 6,390  | 6,355  | 6,640  | 6,856  | 6,741  | 6,409  | 6,234  |
| Other outside support, total ..... | 2,832  | 2,883  | 2,969  | 3,024  | 2,953  | 2,773  | 2,620  | 2,552  |
| All other U.S. ....                | 2,372  | 2,389  | 2,443  | 2,492  | 2,450  | 2,336  | 2,218  | 2,134  |
| Foreign .....                      | 460    | 494    | 526    | 532    | 503    | 437    | 402    | 418    |
| Self-support .....                 | 5,683  | 5,717  | 5,780  | 6,374  | 7,126  | 6,780  | 6,303  | 5,432  |

See explanatory information, if any, and SOURCE at end of table.

**Table 25. Full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Industrial engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 4,295  | 4,658  | 4,770  | 5,598  | 6,081  | 5,902  | 5,910  | 5,328  |
| Federal, total .....               | 562    | 584    | 611    | 705    | 650    | 647    | 637    | 648    |
| Dept. of Defense .....             | 284    | 281    | 299    | 281    | 267    | 249    | 178    | 188    |
| Dept. of HHS, total .....          | 39     | 59     | 60     | 52     | 53     | 78     | 50     | 54     |
| NIH .....                          | 22     | 25     | 27     | 16     | 22     | 36     | 28     | 27     |
| Other HHS .....                    | 17     | 34     | 33     | 36     | 31     | 42     | 22     | 27     |
| NSF .....                          | 115    | 126    | 129    | 188    | 165    | 173    | 215    | 175    |
| USDA .....                         | 2      | 0      | 1      | 5      | 5      | 3      | 1      | 0      |
| All other Federal .....            | 122    | 118    | 122    | 179    | 160    | 144    | 193    | 231    |
| Institutional support .....        | 1,455  | 1,630  | 1,686  | 1,858  | 1,878  | 1,949  | 1,889  | 1,858  |
| Other outside support, total ..... | 504    | 533    | 571    | 496    | 568    | 493    | 551    | 498    |
| All other U.S. ....                | 392    | 387    | 415    | 362    | 430    | 404    | 458    | 420    |
| Foreign .....                      | 112    | 146    | 156    | 134    | 138    | 89     | 93     | 78     |
| Self-support .....                 | 1,774  | 1,911  | 1,902  | 2,539  | 2,985  | 2,813  | 2,833  | 2,324  |
| <b>Mechanical engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 10,416 | 10,492 | 10,867 | 11,687 | 12,383 | 12,395 | 11,875 | 11,119 |
| Federal, total .....               | 2,435  | 2,485  | 2,532  | 2,730  | 2,790  | 2,999  | 2,946  | 2,773  |
| Dept. of Defense .....             | 819    | 840    | 751    | 738    | 730    | 797    | 782    | 821    |
| Dept. of HHS, total .....          | 70     | 61     | 69     | 71     | 87     | 86     | 80     | 93     |
| NIH .....                          | 65     | 54     | 68     | 58     | 77     | 70     | 71     | 82     |
| Other HHS .....                    | 5      | 7      | 1      | 13     | 10     | 16     | 9      | 11     |
| NSF .....                          | 661    | 632    | 639    | 732    | 786    | 812    | 800    | 742    |
| USDA .....                         | 16     | 28     | 26     | 29     | 26     | 9      | 10     | 4      |
| All other Federal .....            | 869    | 924    | 1,047  | 1,160  | 1,161  | 1,295  | 1,274  | 1,113  |
| Institutional support .....        | 3,783  | 3,854  | 4,043  | 4,287  | 4,400  | 4,231  | 4,086  | 3,896  |
| Other outside support, total ..... | 1,536  | 1,542  | 1,599  | 1,686  | 1,618  | 1,561  | 1,573  | 1,606  |
| All other U.S. ....                | 1,303  | 1,327  | 1,383  | 1,415  | 1,401  | 1,391  | 1,333  | 1,352  |
| Foreign .....                      | 233    | 215    | 216    | 271    | 217    | 170    | 240    | 254    |
| Self-support .....                 | 2,662  | 2,611  | 2,693  | 2,984  | 3,575  | 3,604  | 3,270  | 2,844  |
| <b>Other engineering:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 15,285 | 15,513 | 16,094 | 16,729 | 16,566 | 16,631 | 15,623 | 14,902 |
| Federal, total .....               | 4,560  | 4,807  | 4,962  | 5,331  | 5,381  | 5,408  | 5,380  | 5,093  |
| Dept. of Defense .....             | 1,730  | 1,621  | 1,684  | 1,801  | 1,784  | 1,862  | 1,644  | 1,638  |
| Dept. of HHS, total .....          | 307    | 413    | 418    | 435    | 462    | 478    | 458    | 454    |
| NIH .....                          | 287    | 391    | 381    | 415    | 434    | 453    | 420    | 408    |
| Other HHS .....                    | 20     | 22     | 37     | 20     | 28     | 25     | 38     | 46     |
| NSF .....                          | 789    | 887    | 874    | 937    | 1,035  | 1,039  | 1,070  | 1,050  |
| USDA .....                         | 118    | 116    | 125    | 155    | 185    | 168    | 191    | 185    |
| All other Federal .....            | 1,616  | 1,770  | 1,861  | 2,003  | 1,915  | 1,861  | 2,017  | 1,766  |
| Institutional support .....        | 4,755  | 5,027  | 5,209  | 5,345  | 5,093  | 5,134  | 5,021  | 4,733  |
| Other outside support, total ..... | 2,829  | 2,646  | 2,745  | 2,853  | 2,764  | 2,564  | 2,256  | 2,180  |
| All other U.S. ....                | 2,110  | 2,000  | 2,166  | 2,238  | 2,135  | 2,010  | 1,774  | 1,712  |
| Foreign .....                      | 719    | 646    | 579    | 615    | 629    | 554    | 482    | 468    |
| Self-support .....                 | 3,141  | 3,033  | 3,178  | 3,200  | 3,328  | 3,525  | 2,966  | 2,896  |
| <b>Total, health fields:</b>       |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 24,537 | 25,813 | 27,431 | 29,866 | 32,099 | 35,649 | 39,129 | 42,219 |
| Federal, total .....               | 6,321  | 6,475  | 6,771  | 6,968  | 7,328  | 7,295  | 7,778  | 8,001  |
| Dept. of Defense .....             | 245    | 367    | 376    | 417    | 399    | 435    | 382    | 382    |
| Dept. of HHS, total .....          | 4,604  | 4,614  | 4,928  | 5,021  | 5,154  | 5,211  | 5,532  | 5,684  |
| NIH .....                          | 1,408  | 1,448  | 1,629  | 1,846  | 2,050  | 2,266  | 2,345  | 2,453  |
| Other HHS .....                    | 3,196  | 3,166  | 3,299  | 3,175  | 3,104  | 2,945  | 3,187  | 3,231  |
| NSF .....                          | 49     | 48     | 49     | 56     | 70     | 89     | 117    | 99     |
| USDA .....                         | 31     | 46     | 58     | 60     | 69     | 78     | 74     | 55     |
| All other Federal .....            | 1,392  | 1,400  | 1,360  | 1,414  | 1,636  | 1,482  | 1,673  | 1,781  |
| Institutional support .....        | 6,186  | 6,826  | 7,171  | 7,480  | 7,647  | 8,120  | 8,477  | 9,070  |
| Other outside support, total ..... | 1,277  | 1,406  | 1,370  | 1,521  | 1,694  | 1,743  | 1,877  | 2,069  |
| All other U.S. ....                | 881    | 926    | 905    | 1,060  | 1,234  | 1,300  | 1,419  | 1,538  |
| Foreign .....                      | 396    | 480    | 465    | 461    | 460    | 443    | 458    | 531    |
| Self-support .....                 | 10,753 | 11,106 | 12,119 | 13,897 | 15,430 | 18,491 | 20,997 | 23,079 |

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 26. Full-time graduate students in science and engineering fields in all institutions,  
by type and source of major support: 1988-95**

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|                                    | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Total, all types:</b>           |         |         |         |         |         |         |         |         |
| Total, all sources .....           | 250,667 | 256,928 | 265,423 | 277,183 | 290,654 | 294,227 | 293,324 | 288,016 |
| Federal, total .....               | 49,171  | 50,969  | 52,503  | 56,049  | 58,306  | 60,402  | 60,805  | 59,468  |
| Dept. of Defense .....             | 9,301   | 8,773   | 8,492   | 8,711   | 8,848   | 9,315   | 9,067   | 9,039   |
| Dept. of HHS, total .....          | 13,297  | 14,078  | 14,594  | 15,472  | 16,275  | 16,828  | 17,158  | 17,069  |
| NIH .....                          | 12,307  | 12,909  | 13,367  | 14,172  | 15,044  | 15,872  | 15,960  | 15,662  |
| Other HHS .....                    | 990     | 1,169   | 1,227   | 1,300   | 1,231   | 956     | 1,198   | 1,407   |
| NSF .....                          | 11,585  | 11,852  | 11,976  | 12,610  | 13,298  | 13,443  | 13,866  | 13,566  |
| USDA .....                         | 2,560   | 2,682   | 2,664   | 3,015   | 3,147   | 3,246   | 3,348   | 3,189   |
| All other Federal .....            | 12,428  | 13,584  | 14,777  | 16,241  | 16,738  | 17,570  | 17,366  | 16,605  |
| Institutional support .....        | 108,582 | 112,339 | 115,885 | 117,907 | 120,321 | 120,969 | 120,942 | 120,833 |
| Other outside support, total ..... | 24,464  | 24,445  | 24,766  | 25,549  | 26,082  | 24,973  | 25,418  | 24,045  |
| All other U.S. ....                | 17,859  | 18,215  | 18,700  | 19,367  | 20,078  | 19,930  | 20,145  | 19,026  |
| Foreign .....                      | 6,605   | 6,230   | 6,066   | 6,182   | 6,004   | 5,043   | 5,273   | 5,019   |
| Self-support .....                 | 68,450  | 69,175  | 72,269  | 77,678  | 85,945  | 87,883  | 86,159  | 83,670  |
| <b>Fellowships:</b>                |         |         |         |         |         |         |         |         |
| Total, all sources .....           | 20,885  | 21,768  | 23,537  | 24,985  | 26,786  | 27,180  | 26,856  | 26,699  |
| Federal, total .....               | 4,171   | 4,678   | 5,848   | 6,912   | 7,226   | 7,003   | 6,364   | 6,352   |
| Dept. of Defense .....             | 337     | 392     | 579     | 677     | 648     | 627     | 523     | 471     |
| Dept. of HHS, total .....          | 593     | 613     | 748     | 818     | 985     | 1,033   | 1,048   | 1,152   |
| NIH .....                          | 525     | 516     | 672     | 722     | 868     | 919     | 917     | 969     |
| Other HHS .....                    | 68      | 97      | 76      | 96      | 117     | 114     | 131     | 183     |
| NSF .....                          | 1,571   | 1,760   | 2,079   | 2,233   | 2,356   | 2,269   | 2,276   | 2,322   |
| USDA .....                         | 92      | 103     | 103     | 102     | 113     | 113     | 112     | 124     |
| All other Federal .....            | 1,578   | 1,810   | 2,339   | 3,082   | 3,124   | 2,961   | 2,405   | 2,283   |
| Institutional support .....        | 11,018  | 11,475  | 12,082  | 12,314  | 13,440  | 14,012  | 14,006  | 14,316  |
| Other outside support, total ..... | 5,696   | 5,615   | 5,607   | 5,759   | 6,120   | 6,165   | 6,486   | 6,031   |
| All other U.S. ....                | 3,245   | 3,396   | 3,467   | 3,550   | 3,799   | 3,703   | 4,069   | 3,826   |
| Foreign .....                      | 2,451   | 2,219   | 2,140   | 2,209   | 2,321   | 2,462   | 2,417   | 2,205   |
| Self-support .....                 | N/A     |
| <b>Traineeships:</b>               |         |         |         |         |         |         |         |         |
| Total, all sources .....           | 9,514   | 9,739   | 10,064  | 10,466  | 10,052  | 10,290  | 10,356  | 10,620  |
| Federal, total .....               | 4,476   | 4,600   | 4,876   | 5,454   | 5,552   | 5,774   | 5,857   | 5,670   |
| Dept. of Defense .....             | 112     | 92      | 85      | 116     | 94      | 113     | 122     | 104     |
| Dept. of HHS, total .....          | 3,861   | 3,789   | 4,043   | 4,384   | 4,388   | 4,379   | 4,493   | 4,362   |
| NIH .....                          | 3,589   | 3,508   | 3,732   | 4,084   | 4,107   | 4,195   | 4,206   | 4,018   |
| Other HHS .....                    | 272     | 281     | 311     | 300     | 281     | 184     | 287     | 344     |
| NSF .....                          | 62      | 82      | 45      | 80      | 104     | 165     | 250     | 334     |
| USDA .....                         | 43      | 48      | 53      | 34      | 28      | 42      | 37      | 18      |
| All other Federal .....            | 398     | 589     | 650     | 840     | 938     | 1,075   | 955     | 852     |
| Institutional support .....        | 4,158   | 4,268   | 4,433   | 4,275   | 3,712   | 3,635   | 3,606   | 4,247   |
| Other outside support, total ..... | 880     | 871     | 755     | 737     | 788     | 881     | 893     | 703     |
| All other U.S. ....                | 631     | 591     | 516     | 552     | 581     | 587     | 672     | 510     |
| Foreign .....                      | 249     | 280     | 239     | 185     | 207     | 294     | 221     | 193     |
| Self-support .....                 | N/A     |
| <b>Research assistantships:</b>    |         |         |         |         |         |         |         |         |
| Total, all sources .....           | 71,695  | 75,816  | 77,343  | 81,214  | 84,078  | 86,204  | 87,654  | 85,408  |
| Federal, total .....               | 35,645  | 37,372  | 37,264  | 39,352  | 41,077  | 43,031  | 43,906  | 42,843  |
| Dept. of Defense .....             | 6,002   | 5,879   | 5,382   | 5,452   | 5,703   | 6,204   | 6,177   | 6,293   |
| Dept. of HHS, total .....          | 8,506   | 9,340   | 9,495   | 9,958   | 10,473  | 10,976  | 11,243  | 11,125  |
| NIH .....                          | 7,883   | 8,574   | 8,701   | 9,099   | 9,700   | 10,386  | 10,528  | 10,327  |
| Other HHS .....                    | 623     | 766     | 794     | 859     | 773     | 590     | 715     | 798     |
| NSF .....                          | 9,800   | 9,854   | 9,692   | 10,144  | 10,628  | 10,769  | 11,145  | 10,610  |
| USDA .....                         | 2,275   | 2,407   | 2,386   | 2,761   | 2,896   | 2,964   | 3,073   | 2,949   |
| All other Federal .....            | 9,062   | 9,892   | 10,309  | 11,037  | 11,377  | 12,118  | 12,268  | 11,866  |
| Institutional support .....        | 25,093  | 27,121  | 28,382  | 29,426  | 29,953  | 29,900  | 30,649  | 30,263  |
| Other outside support, total ..... | 10,957  | 11,323  | 11,697  | 12,436  | 13,048  | 13,273  | 13,099  | 12,302  |
| All other U.S. ....                | 10,347  | 10,669  | 10,984  | 11,630  | 12,237  | 12,415  | 12,336  | 11,544  |
| Foreign .....                      | 610     | 654     | 713     | 806     | 811     | 858     | 763     | 758     |
| Self-support .....                 | N/A     |
| <b>Teaching assistantships:</b>    |         |         |         |         |         |         |         |         |
| Total, all sources .....           | 60,873  | 62,009  | 62,605  | 62,746  | 63,235  | 64,821  | 64,083  | 63,292  |
| Federal, total .....               | 435     | 427     | 554     | 428     | 574     | 776     | 677     | 639     |
| Dept. of Defense .....             | N/A     |
| Dept. of HHS, total .....          | 109     | 116     | 95      | 87      | 166     | 162     | 136     | 113     |
| NIH .....                          | 106     | 110     | 77      | 74      | 149     | 156     | 127     | 106     |
| Other HHS .....                    | 3       | 6       | 18      | 13      | 17      | 6       | 9       | 7       |
| NSF .....                          | 58      | 66      | 84      | 73      | 112     | 140     | 107     | 157     |
| USDA .....                         | 44      | 33      | 44      | 33      | 28      | 46      | 49      | 37      |
| All other Federal .....            | 224     | 212     | 331     | 235     | 268     | 428     | 385     | 332     |
| Institutional support .....        | 59,975  | 61,071  | 61,542  | 61,810  | 62,120  | 63,461  | 62,796  | 62,073  |
| Other outside support, total ..... | 463     | 511     | 509     | 508     | 541     | 584     | 610     | 580     |
| All other U.S. ....                | 463     | 511     | 509     | 508     | 541     | 584     | 610     | 580     |
| Foreign .....                      | N/A     |
| Self-support .....                 | N/A     |

See explanatory information, if any, and SOURCE at end of table.

**Table 26. Full-time graduate students in science and engineering fields in all institutions,  
by type and source of major support: 1988-95**

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|                                    | 1988   | 1989   | 1990   | 1991   | 1992    | 1993    | 1994    | 1995    |
|------------------------------------|--------|--------|--------|--------|---------|---------|---------|---------|
| Other types of support:            |        |        |        |        |         |         |         |         |
| Total, all sources .....           | 87,700 | 87,596 | 91,874 | 97,772 | 106,503 | 105,732 | 104,375 | 101,997 |
| Federal, total .....               | 4,444  | 3,892  | 3,961  | 3,903  | 3,877   | 3,818   | 4,001   | 3,964   |
| Dept. of Defense .....             | 2,850  | 2,410  | 2,446  | 2,466  | 2,403   | 2,371   | 2,245   | 2,171   |
| Dept. of HHS, total .....          | 228    | 220    | 213    | 225    | 263     | 278     | 238     | 317     |
| NIH .....                          | 204    | 201    | 185    | 193    | 220     | 216     | 182     | 242     |
| Other HHS .....                    | 24     | 19     | 28     | 32     | 43      | 62      | 56      | 75      |
| NSF .....                          | 94     | 90     | 76     | 80     | 98      | 100     | 88      | 143     |
| USDA .....                         | 106    | 91     | 78     | 85     | 82      | 81      | 77      | 61      |
| All other Federal .....            | 1,166  | 1,081  | 1,148  | 1,047  | 1,031   | 988     | 1,353   | 1,272   |
| Institutional support .....        | 8,338  | 8,404  | 9,446  | 10,082 | 11,096  | 9,961   | 9,885   | 9,934   |
| Other outside support, total ..... | 6,468  | 6,125  | 6,198  | 6,109  | 5,585   | 4,070   | 4,330   | 4,429   |
| All other U.S. .....               | 3,173  | 3,048  | 3,224  | 3,127  | 2,920   | 2,641   | 2,458   | 2,566   |
| Foreign .....                      | 3,295  | 3,077  | 2,974  | 2,982  | 2,665   | 1,429   | 1,872   | 1,863   |
| Self-support .....                 | 68,450 | 69,175 | 72,269 | 77,678 | 85,945  | 87,883  | 86,159  | 83,670  |

**KEY:** N/A = Not applicable

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

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| Field and source of major support                | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Total, all surveyed fields:</b>               |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 179,579 | 182,803 | 186,737 | 193,548 | 200,888 | 200,898 | 197,614 | 191,695 |
| Federal, total .....                             | 37,978  | 39,129  | 39,788  | 41,950  | 43,068  | 44,082  | 44,248  | 42,860  |
| Dept. of Defense .....                           | 8,293   | 7,777   | 7,536   | 7,750   | 7,796   | 8,115   | 7,846   | 7,799   |
| Dept. of HHS, total .....                        | 8,891   | 9,419   | 9,658   | 10,003  | 10,487  | 10,697  | 10,926  | 10,803  |
| NIH .....  | 8,013   | 8,359   | 8,557   | 8,892   | 9,466   | 9,849   | 9,880   | 9,601   |
| Other HHS .....                                  | 878     | 1,060   | 1,101   | 1,111   | 1,021   | 848     | 1,046   | 1,202   |
| NSF .....  | 9,247   | 9,361   | 9,336   | 9,687   | 10,003  | 10,050  | 10,400  | 9,958   |
| USDA .....                                       | 1,779   | 1,852   | 1,807   | 2,061   | 2,167   | 2,128   | 2,133   | 2,019   |
| All other Federal .....                          | 9,768   | 10,720  | 11,451  | 12,449  | 12,615  | 13,092  | 12,943  | 12,281  |
| Institutional support .....                      | 75,233  | 77,742  | 79,374  | 80,101  | 80,749  | 79,948  | 79,116  | 78,667  |
| Other outside support, total .....               | 19,724  | 19,624  | 19,548  | 20,086  | 20,309  | 19,140  | 19,230  | 17,942  |
| All other U.S. .....                             | 13,953  | 14,111  | 14,229  | 14,764  | 15,181  | 14,830  | 14,799  | 13,783  |
| Foreign .....                                    | 5,771   | 5,513   | 5,319   | 5,322   | 5,128   | 4,310   | 4,431   | 4,159   |
| Self-support .....                               | 46,644  | 46,308  | 48,027  | 51,411  | 56,762  | 57,728  | 55,020  | 52,226  |
| <b>Total, science and engineering:</b>           |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 172,348 | 175,118 | 178,708 | 185,098 | 191,855 | 190,972 | 186,839 | 180,211 |
| Federal, total .....                             | 36,399  | 37,307  | 37,981  | 40,062  | 41,091  | 42,015  | 41,970  | 40,577  |
| Dept. of Defense .....                           | 8,163   | 7,566   | 7,344   | 7,537   | 7,612   | 7,917   | 7,657   | 7,604   |
| Dept. of HHS, total .....                        | 7,797   | 8,224   | 8,390   | 8,675   | 9,115   | 9,275   | 9,401   | 9,259   |
| NIH .....  | 7,291   | 7,613   | 7,767   | 8,035   | 8,516   | 8,809   | 8,788   | 8,512   |
| Other HHS .....                                  | 506     | 611     | 623     | 640     | 599     | 466     | 613     | 747     |
| NSF .....  | 9,220   | 9,333   | 9,309   | 9,660   | 9,963   | 9,997   | 10,333  | 9,908   |
| USDA .....                                       | 1,760   | 1,817   | 1,773   | 2,027   | 2,128   | 2,088   | 2,085   | 1,983   |
| All other Federal .....                          | 9,459   | 10,367  | 11,165  | 12,163  | 12,273  | 12,738  | 12,494  | 11,823  |
| Institutional support .....                      | 72,987  | 75,261  | 76,803  | 77,478  | 78,055  | 77,241  | 76,309  | 75,640  |
| Other outside support, total .....               | 19,086  | 18,924  | 18,832  | 19,346  | 19,576  | 18,365  | 18,459  | 17,120  |
| All other U.S. .....                             | 13,582  | 13,705  | 13,797  | 14,277  | 14,665  | 14,283  | 14,243  | 13,184  |
| Foreign .....                                    | 5,504   | 5,219   | 5,035   | 5,069   | 4,911   | 4,082   | 4,216   | 3,936   |
| Self-support .....                               | 43,876  | 43,626  | 45,092  | 48,212  | 53,133  | 53,351  | 50,101  | 46,874  |
| <b>Sciences, total:</b>                          |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 116,960 | 118,879 | 121,429 | 123,747 | 128,093 | 128,344 | 126,848 | 123,887 |
| Federal, total .....                             | 23,925  | 24,784  | 25,245  | 26,358  | 27,069  | 27,741  | 27,770  | 26,880  |
| Dept. of Defense .....                           | 3,550   | 3,190   | 3,078   | 3,150   | 3,168   | 3,347   | 3,445   | 3,354   |
| Dept. of HHS, total .....                        | 7,325   | 7,686   | 7,794   | 8,081   | 8,439   | 8,587   | 8,715   | 8,567   |
| NIH .....  | 6,872   | 7,132   | 7,243   | 7,502   | 7,922   | 8,221   | 8,205   | 7,937   |
| Other HHS .....                                  | 453     | 554     | 551     | 579     | 517     | 366     | 510     | 630     |
| NSF .....  | 5,855   | 6,027   | 6,019   | 6,069   | 6,232   | 6,280   | 6,452   | 6,174   |
| USDA .....                                       | 1,590   | 1,635   | 1,569   | 1,789   | 1,823   | 1,844   | 1,810   | 1,703   |
| All other Federal .....                          | 5,605   | 6,246   | 6,785   | 7,269   | 7,407   | 7,683   | 7,348   | 7,082   |
| Institutional support .....                      | 54,184  | 55,478  | 56,684  | 56,258  | 56,812  | 56,240  | 55,914  | 56,013  |
| Other outside support, total .....               | 10,174  | 10,037  | 9,790   | 10,110  | 10,445  | 10,024  | 10,396  | 9,373   |
| All other U.S. .....                             | 6,577   | 6,746   | 6,600   | 6,959   | 7,402   | 7,433   | 7,622   | 6,906   |
| Foreign .....                                    | 3,597   | 3,291   | 3,190   | 3,151   | 3,043   | 2,591   | 2,774   | 2,467   |
| Self-support .....                               | 28,677  | 28,580  | 29,710  | 31,021  | 33,767  | 34,339  | 32,768  | 31,621  |
| <b>Physical sciences:</b>                        |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 22,208  | 22,547  | 22,664  | 22,845  | 23,173  | 22,888  | 22,277  | 21,232  |
| Federal, total .....                             | 7,858   | 8,118   | 8,080   | 8,441   | 8,521   | 8,456   | 8,429   | 7,842   |
| Dept. of Defense .....                           | 1,242   | 1,167   | 1,025   | 1,019   | 1,002   | 981     | 1,084   | 992     |
| Dept. of HHS, total .....                        | 1,524   | 1,462   | 1,438   | 1,388   | 1,484   | 1,424   | 1,447   | 1,328   |
| NIH .....  | 1,412   | 1,360   | 1,333   | 1,276   | 1,402   | 1,352   | 1,355   | 1,196   |
| Other HHS .....                                  | 112     | 102     | 105     | 112     | 82      | 72      | 92      | 132     |
| NSF .....  | 2,965   | 2,896   | 2,858   | 2,855   | 2,829   | 2,813   | 2,913   | 2,770   |
| USDA .....                                       | 21      | 35      | 42      | 45      | 49      | 43      | 34      | 31      |
| All other Federal .....                          | 2,106   | 2,558   | 2,717   | 3,134   | 3,157   | 3,195   | 2,951   | 2,721   |
| Institutional support .....                      | 11,235  | 11,395  | 11,518  | 11,141  | 11,361  | 11,148  | 10,682  | 10,709  |
| Other outside support, total .....               | 1,635   | 1,597   | 1,516   | 1,706   | 1,777   | 1,654   | 1,767   | 1,539   |
| All other U.S. .....                             | 1,354   | 1,381   | 1,306   | 1,448   | 1,522   | 1,427   | 1,512   | 1,305   |
| Foreign .....                                    | 281     | 216     | 210     | 258     | 255     | 227     | 255     | 234     |
| Self-support .....                               | 1,480   | 1,437   | 1,550   | 1,557   | 1,514   | 1,630   | 1,399   | 1,142   |
| <b>Earth, atmospheric, &amp; ocean sciences:</b> |         |         |         |         |         |         |         |         |
| Total, all sources .....                         | 7,444   | 7,268   | 7,317   | 7,197   | 7,588   | 7,815   | 7,676   | 7,389   |
| Federal, total .....                             | 2,087   | 2,142   | 2,196   | 2,238   | 2,400   | 2,544   | 2,511   | 2,377   |
| Dept. of Defense .....                           | 387     | 340     | 357     | 357     | 361     | 392     | 367     | 318     |
| Dept. of HHS, total .....                        | 33      | 17      | 18      | 34      | 28      | 30      | 20      | 23      |
| NIH .....  | 13      | 11      | 12      | 16      | 23      | 26      | 19      | 21      |
| Other HHS .....                                  | 20      | 6       | 6       | 18      | 5       | 4       | 1       | 2       |
| NSF .....  | 934     | 943     | 892     | 856     | 925     | 953     | 974     | 928     |
| USDA .....                                       | 23      | 28      | 34      | 48      | 57      | 40      | 41      | 44      |
| All other Federal .....                          | 710     | 814     | 895     | 943     | 1,029   | 1,129   | 1,109   | 1,064   |
| Institutional support .....                      | 3,076   | 3,022   | 3,002   | 2,976   | 2,936   | 2,939   | 2,835   | 2,822   |
| Other outside support, total .....               | 809     | 773     | 725     | 724     | 764     | 706     | 741     | 708     |
| All other U.S. .....                             | 501     | 477     | 501     | 493     | 561     | 544     | 556     | 515     |
| Foreign .....                                    | 308     | 296     | 224     | 231     | 203     | 162     | 185     | 193     |
| Self-support .....                               | 1,472   | 1,331   | 1,394   | 1,259   | 1,488   | 1,626   | 1,589   | 1,482   |

See explanatory information, if any, and SOURCE at end of table.

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions, by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mathematical sciences:</b>      |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 9,794  | 9,746  | 9,821  | 10,035 | 10,250 | 10,096 | 9,810  | 9,219  |
| Federal, total .....               | 971    | 936    | 1,035  | 1,180  | 1,146  | 1,121  | 1,031  | 975    |
| Dept. of Defense .....             | 436    | 294    | 284    | 334    | 327    | 344    | 324    | 280    |
| Dept. of HHS, total .....          | 21     | 21     | 28     | 46     | 99     | 63     | 62     | 67     |
| NIH .....                          | 19     | 19     | 21     | 45     | 95     | 58     | 55     | 50     |
| Other HHS .....                    | 2      | 2      | 7      | 1      | 4      | 5      | 7      | 17     |
| NSF .....                          | 378    | 393    | 412    | 362    | 347    | 352    | 366    | 331    |
| USDA .....                         | 12     | 14     | 16     | 16     | 17     | 17     | 9      | 10     |
| All other Federal .....            | 124    | 214    | 295    | 422    | 356    | 345    | 270    | 287    |
| Institutional support .....        | 6,497  | 6,612  | 6,611  | 6,651  | 6,651  | 6,560  | 6,600  | 6,347  |
| Other outside support, total ..... | 502    | 468    | 459    | 436    | 472    | 375    | 387    | 340    |
| All other U.S. ....                | 284    | 273    | 249    | 217    | 254    | 196    | 213    | 198    |
| Foreign .....                      | 218    | 195    | 210    | 219    | 218    | 179    | 174    | 142    |
| Self-support .....                 | 1,824  | 1,730  | 1,716  | 1,768  | 1,981  | 2,040  | 1,792  | 1,557  |
| <b>Computer sciences:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 11,795 | 12,355 | 13,218 | 13,035 | 13,947 | 13,805 | 13,153 | 12,899 |
| Federal, total .....               | 1,909  | 1,969  | 2,064  | 2,192  | 2,263  | 2,426  | 2,553  | 2,629  |
| Dept. of Defense .....             | 1,041  | 984    | 980    | 990    | 1,041  | 1,132  | 1,134  | 1,238  |
| Dept. of HHS, total .....          | 59     | 48     | 50     | 56     | 83     | 84     | 81     | 86     |
| NIH .....                          | 59     | 41     | 43     | 53     | 81     | 78     | 75     | 76     |
| Other HHS .....                    | 0      | 7      | 7      | 3      | 2      | 6      | 6      | 10     |
| NSF .....                          | 552    | 668    | 702    | 782    | 827    | 817    | 866    | 858    |
| USDA .....                         | 10     | 7      | 12     | 7      | 6      | 5      | 6      | 10     |
| All other Federal .....            | 247    | 262    | 320    | 357    | 306    | 388    | 466    | 437    |
| Institutional support .....        | 4,063  | 4,319  | 4,522  | 4,414  | 4,504  | 4,417  | 4,316  | 4,314  |
| Other outside support, total ..... | 1,036  | 1,048  | 1,044  | 1,071  | 1,120  | 1,113  | 1,155  | 1,028  |
| All other U.S. ....                | 775    | 778    | 760    | 791    | 846    | 905    | 901    | 825    |
| Foreign .....                      | 261    | 270    | 284    | 280    | 274    | 208    | 254    | 203    |
| Self-support .....                 | 4,787  | 5,019  | 5,588  | 5,358  | 6,060  | 5,849  | 5,129  | 4,928  |
| <b>Agricultural sciences:</b>      |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 6,640  | 6,557  | 6,454  | 6,424  | 6,454  | 6,281  | 6,166  | 6,174  |
| Federal, total .....               | 1,370  | 1,380  | 1,315  | 1,364  | 1,416  | 1,304  | 1,236  | 1,312  |
| Dept. of Defense .....             | 27     | 10     | 12     | 18     | 15     | 27     | 26     | 24     |
| Dept. of HHS, total .....          | 23     | 25     | 34     | 36     | 33     | 22     | 32     | 18     |
| NIH .....                          | 22     | 21     | 29     | 32     | 30     | 20     | 29     | 15     |
| Other HHS .....                    | 1      | 4      | 5      | 4      | 3      | 2      | 3      | 3      |
| NSF .....                          | 36     | 35     | 45     | 35     | 43     | 44     | 53     | 54     |
| USDA .....                         | 726    | 777    | 677    | 792    | 781    | 760    | 695    | 754    |
| All other Federal .....            | 558    | 533    | 547    | 483    | 544    | 451    | 430    | 462    |
| Institutional support .....        | 2,430  | 2,408  | 2,409  | 2,338  | 2,379  | 2,345  | 2,397  | 2,498  |
| Other outside support, total ..... | 1,423  | 1,339  | 1,361  | 1,311  | 1,233  | 1,208  | 1,225  | 1,048  |
| All other U.S. ....                | 713    | 774    | 802    | 767    | 752    | 807    | 771    | 725    |
| Foreign .....                      | 710    | 565    | 559    | 544    | 481    | 401    | 454    | 323    |
| Self-support .....                 | 1,417  | 1,430  | 1,369  | 1,411  | 1,426  | 1,424  | 1,308  | 1,316  |
| <b>Biological sciences:</b>        |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 22,404 | 22,736 | 22,789 | 23,498 | 24,230 | 24,920 | 25,493 | 25,284 |
| Federal, total .....               | 7,189  | 7,571  | 7,742  | 8,097  | 8,364  | 8,861  | 9,071  | 8,887  |
| Dept. of Defense .....             | 182    | 163    | 135    | 145    | 141    | 163    | 212    | 195    |
| Dept. of HHS, total .....          | 5,097  | 5,475  | 5,564  | 5,872  | 6,014  | 6,292  | 6,427  | 6,417  |
| NIH .....                          | 4,967  | 5,293  | 5,370  | 5,621  | 5,807  | 6,137  | 6,169  | 6,088  |
| Other HHS .....                    | 130    | 182    | 194    | 251    | 207    | 155    | 258    | 329    |
| NSF .....                          | 657    | 711    | 717    | 730    | 763    | 771    | 789    | 751    |
| USDA .....                         | 571    | 543    | 554    | 611    | 632    | 712    | 724    | 591    |
| All other Federal .....            | 682    | 679    | 772    | 739    | 814    | 923    | 919    | 933    |
| Institutional support .....        | 10,132 | 10,271 | 10,408 | 10,576 | 10,691 | 10,597 | 11,033 | 11,034 |
| Other outside support, total ..... | 2,090  | 2,109  | 2,074  | 2,236  | 2,343  | 2,295  | 2,372  | 2,161  |
| All other U.S. ....                | 1,513  | 1,534  | 1,568  | 1,744  | 1,851  | 1,888  | 1,960  | 1,784  |
| Foreign .....                      | 577    | 575    | 506    | 492    | 492    | 407    | 412    | 377    |
| Self-support .....                 | 2,993  | 2,785  | 2,565  | 2,589  | 2,832  | 3,167  | 3,017  | 3,202  |
| <b>Psychology:</b>                 |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 10,199 | 10,467 | 10,642 | 10,957 | 11,216 | 11,229 | 11,187 | 11,116 |
| Federal, total .....               | 911    | 979    | 1,014  | 960    | 978    | 1,007  | 966    | 890    |
| Dept. of Defense .....             | 91     | 70     | 99     | 89     | 75     | 93     | 90     | 83     |
| Dept. of HHS, total .....          | 440    | 502    | 522    | 504    | 532    | 522    | 476    | 445    |
| NIH .....                          | 301    | 301    | 337    | 351    | 372    | 441    | 389    | 379    |
| Other HHS .....                    | 139    | 201    | 185    | 153    | 160    | 81     | 87     | 66     |
| NSF .....                          | 107    | 109    | 103    | 107    | 127    | 139    | 124    | 114    |
| USDA .....                         | 5      | 7      | 11     | 10     | 5      | 8      | 18     | 5      |
| All other Federal .....            | 268    | 291    | 279    | 250    | 239    | 245    | 258    | 243    |
| Institutional support .....        | 4,263  | 4,317  | 4,426  | 4,323  | 4,325  | 4,553  | 4,432  | 4,518  |
| Other outside support, total ..... | 448    | 444    | 438    | 398    | 416    | 377    | 434    | 388    |
| All other U.S. ....                | 416    | 421    | 407    | 372    | 389    | 353    | 401    | 374    |
| Foreign .....                      | 32     | 23     | 31     | 26     | 27     | 24     | 33     | 14     |
| Self-support .....                 | 4,577  | 4,727  | 4,764  | 5,276  | 5,497  | 5,292  | 5,355  | 5,320  |

See explanatory information, if any, and SOURCE at end of table.

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Social sciences:</b>            |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 26,476 | 27,203 | 28,524 | 29,756 | 31,235 | 31,310 | 31,086 | 30,574 |
| Federal, total .....               | 1,630  | 1,689  | 1,799  | 1,886  | 1,981  | 2,022  | 1,973  | 1,968  |
| Dept. of Defense .....             | 144    | 162    | 186    | 198    | 206    | 215    | 208    | 224    |
| Dept. of HHS, total .....          | 128    | 136    | 140    | 145    | 166    | 150    | 170    | 183    |
| NIH .....                          | 79     | 86     | 98     | 108    | 112    | 109    | 114    | 112    |
| Other HHS .....                    | 49     | 50     | 42     | 37     | 54     | 41     | 56     | 71     |
| NSF .....                          | 226    | 272    | 290    | 342    | 371    | 391    | 367    | 368    |
| USDA .....                         | 222    | 224    | 223    | 260    | 276    | 259    | 283    | 258    |
| All other Federal .....            | 910    | 895    | 960    | 941    | 962    | 1,007  | 945    | 935    |
| Institutional support .....        | 12,488 | 13,134 | 13,788 | 13,839 | 13,965 | 13,681 | 13,619 | 13,771 |
| Other outside support, total ..... | 2,231  | 2,259  | 2,173  | 2,228  | 2,320  | 2,296  | 2,315  | 2,161  |
| All other U.S. ....                | 1,021  | 1,108  | 1,007  | 1,127  | 1,227  | 1,313  | 1,308  | 1,180  |
| Foreign .....                      | 1,210  | 1,151  | 1,166  | 1,101  | 1,093  | 983    | 1,007  | 981    |
| Self-support .....                 | 10,127 | 10,121 | 10,764 | 11,803 | 12,969 | 13,311 | 13,179 | 12,674 |
| <b>Engineering, total:</b>         |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 55,388 | 56,239 | 57,279 | 61,351 | 63,762 | 62,628 | 59,991 | 56,324 |
| Federal, total .....               | 12,474 | 12,523 | 12,736 | 13,704 | 14,022 | 14,274 | 14,200 | 13,697 |
| Dept. of Defense .....             | 4,613  | 4,376  | 4,266  | 4,387  | 4,444  | 4,570  | 4,212  | 4,250  |
| Dept. of HHS, total .....          | 472    | 538    | 596    | 594    | 676    | 688    | 686    | 692    |
| NIH .....                          | 419    | 481    | 524    | 533    | 594    | 588    | 583    | 575    |
| Other HHS .....                    | 53     | 57     | 72     | 61     | 82     | 100    | 103    | 117    |
| NSF .....                          | 3,365  | 3,306  | 3,290  | 3,591  | 3,731  | 3,717  | 3,881  | 3,734  |
| USDA .....                         | 170    | 182    | 204    | 238    | 305    | 244    | 275    | 280    |
| All other Federal .....            | 3,854  | 4,121  | 4,380  | 4,894  | 4,866  | 5,055  | 5,146  | 4,741  |
| Institutional support .....        | 18,803 | 19,783 | 20,119 | 21,220 | 21,243 | 21,001 | 20,395 | 19,627 |
| Other outside support, total ..... | 8,912  | 8,887  | 9,042  | 9,236  | 9,131  | 8,341  | 8,063  | 7,747  |
| All other U.S. ....                | 7,005  | 6,959  | 7,197  | 7,318  | 7,263  | 6,850  | 6,621  | 6,278  |
| Foreign .....                      | 1,907  | 1,928  | 1,845  | 1,918  | 1,868  | 1,491  | 1,442  | 1,469  |
| Self-support .....                 | 15,199 | 15,046 | 15,382 | 17,191 | 19,366 | 19,012 | 17,333 | 15,253 |
| <b>Chemical engineering:</b>       |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 4,567  | 4,486  | 4,547  | 4,803  | 4,849  | 4,875  | 4,912  | 4,742  |
| Federal, total .....               | 1,250  | 1,229  | 1,249  | 1,287  | 1,322  | 1,379  | 1,352  | 1,406  |
| Dept. of Defense .....             | 132    | 110    | 90     | 118    | 104    | 108    | 110    | 140    |
| Dept. of HHS, total .....          | 69     | 67     | 93     | 99     | 123    | 102    | 125    | 125    |
| NIH .....                          | 65     | 67     | 93     | 95     | 107    | 83     | 99     | 100    |
| Other HHS .....                    | 4      | 0      | 0      | 4      | 16     | 19     | 26     | 25     |
| NSF .....                          | 581    | 557    | 554    | 531    | 543    | 569    | 573    | 594    |
| USDA .....                         | 7      | 13     | 23     | 15     | 35     | 36     | 39     | 54     |
| All other Federal .....            | 461    | 482    | 489    | 524    | 517    | 564    | 505    | 493    |
| Institutional support .....        | 1,696  | 1,672  | 1,761  | 1,932  | 1,892  | 1,870  | 1,960  | 1,802  |
| Other outside support, total ..... | 1,107  | 1,107  | 1,054  | 1,010  | 957    | 854    | 935    | 867    |
| All other U.S. ....                | 1,006  | 1,021  | 964    | 911    | 874    | 771    | 844    | 764    |
| Foreign .....                      | 101    | 86     | 90     | 99     | 83     | 83     | 91     | 103    |
| Self-support .....                 | 514    | 478    | 483    | 574    | 678    | 772    | 665    | 667    |
| <b>Civil engineering:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 8,381  | 8,315  | 8,347  | 9,309  | 10,126 | 9,934  | 9,855  | 9,431  |
| Federal, total .....               | 1,310  | 1,199  | 1,223  | 1,452  | 1,647  | 1,613  | 1,646  | 1,517  |
| Dept. of Defense .....             | 296    | 244    | 208    | 243    | 306    | 283    | 261    | 232    |
| Dept. of HHS, total .....          | 3      | 11     | 10     | 26     | 27     | 32     | 32     | 26     |
| NIH .....                          | 1      | 9      | 7      | 22     | 22     | 24     | 24     | 17     |
| Other HHS .....                    | 2      | 2      | 3      | 4      | 5      | 8      | 8      | 9      |
| NSF .....                          | 371    | 336    | 353    | 416    | 432    | 410    | 465    | 399    |
| USDA .....                         | 32     | 27     | 30     | 41     | 63     | 50     | 52     | 44     |
| All other Federal .....            | 608    | 581    | 622    | 726    | 819    | 838    | 836    | 816    |
| Institutional support .....        | 3,231  | 3,269  | 3,228  | 3,501  | 3,573  | 3,602  | 3,663  | 3,706  |
| Other outside support, total ..... | 937    | 1,022  | 1,036  | 1,100  | 1,217  | 1,029  | 1,024  | 948    |
| All other U.S. ....                | 560    | 595    | 652    | 719    | 815    | 756    | 764    | 693    |
| Foreign .....                      | 377    | 427    | 384    | 381    | 402    | 273    | 260    | 255    |
| Self-support .....                 | 2,903  | 2,825  | 2,860  | 3,256  | 3,689  | 3,690  | 3,522  | 3,260  |
| <b>Electrical engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 16,024 | 16,644 | 16,719 | 17,739 | 18,570 | 17,956 | 17,023 | 15,835 |
| Federal, total .....               | 3,184  | 3,127  | 3,173  | 3,415  | 3,509  | 3,589  | 3,591  | 3,578  |
| Dept. of Defense .....             | 1,590  | 1,523  | 1,506  | 1,490  | 1,528  | 1,576  | 1,513  | 1,528  |
| Dept. of HHS, total .....          | 86     | 54     | 66     | 67     | 71     | 86     | 83     | 95     |
| NIH .....                          | 66     | 41     | 46     | 60     | 65     | 73     | 68     | 72     |
| Other HHS .....                    | 20     | 13     | 20     | 7      | 6      | 13     | 15     | 23     |
| NSF .....                          | 1,011  | 967    | 979    | 1,103  | 1,162  | 1,095  | 1,142  | 1,149  |
| USDA .....                         | 11     | 13     | 14     | 18     | 24     | 9      | 19     | 30     |
| All other Federal .....            | 486    | 570    | 608    | 737    | 724    | 823    | 834    | 776    |
| Institutional support .....        | 5,143  | 5,742  | 5,653  | 5,934  | 6,082  | 5,929  | 5,583  | 5,421  |
| Other outside support, total ..... | 2,556  | 2,599  | 2,646  | 2,675  | 2,630  | 2,467  | 2,350  | 2,263  |
| All other U.S. ....                | 2,126  | 2,137  | 2,166  | 2,178  | 2,158  | 2,056  | 1,973  | 1,873  |
| Foreign .....                      | 430    | 462    | 480    | 497    | 472    | 411    | 377    | 390    |
| Self-support .....                 | 5,141  | 5,176  | 5,247  | 5,715  | 6,349  | 5,971  | 5,499  | 4,573  |

See explanatory information, if any, and SOURCE at end of table.

**Table 27. Male full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Industrial engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 3,559  | 3,751  | 3,862  | 4,556  | 4,906  | 4,729  | 4,612  | 4,158  |
| Federal, total .....               | 468    | 492    | 509    | 568    | 500    | 499    | 508    | 511    |
| Dept. of Defense .....             | 246    | 236    | 252    | 245    | 224    | 211    | 154    | 157    |
| Dept. of HHS, total .....          | 27     | 46     | 43     | 36     | 33     | 50     | 39     | 31     |
| NIH .....                          | 18     | 23     | 21     | 11     | 10     | 22     | 24     | 19     |
| Other HHS .....                    | 9      | 23     | 22     | 25     | 23     | 28     | 15     | 12     |
| NSF .....                          | 95     | 109    | 115    | 147    | 120    | 136    | 176    | 139    |
| USDA .....                         | 2      | 0      | 1      | 4      | 4      | 2      | 1      | 0      |
| All other Federal .....            | 98     | 101    | 98     | 136    | 119    | 100    | 138    | 184    |
| Institutional support .....        | 1,195  | 1,287  | 1,340  | 1,471  | 1,475  | 1,572  | 1,473  | 1,420  |
| Other outside support, total ..... | 418    | 448    | 486    | 426    | 480    | 403    | 436    | 420    |
| All other U.S. ....                | 319    | 318    | 341    | 303    | 351    | 329    | 366    | 345    |
| Foreign .....                      | 99     | 130    | 145    | 123    | 129    | 74     | 70     | 75     |
| Self-support .....                 | 1,478  | 1,524  | 1,527  | 2,091  | 2,451  | 2,255  | 2,195  | 1,807  |
| <b>Mechanical engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 9,581  | 9,637  | 10,019 | 10,745 | 11,297 | 11,210 | 10,658 | 9,988  |
| Federal, total .....               | 2,267  | 2,297  | 2,330  | 2,472  | 2,529  | 2,684  | 2,620  | 2,476  |
| Dept. of Defense .....             | 765    | 786    | 703    | 681    | 678    | 735    | 714    | 758    |
| Dept. of HHS, total .....          | 56     | 45     | 59     | 58     | 76     | 72     | 70     | 80     |
| NIH .....                          | 53     | 41     | 58     | 50     | 66     | 57     | 63     | 71     |
| Other HHS .....                    | 3      | 4      | 1      | 8      | 10     | 15     | 7      | 9      |
| NSF .....                          | 629    | 585    | 578    | 636    | 676    | 701    | 691    | 646    |
| USDA .....                         | 16     | 27     | 25     | 26     | 22     | 8      | 8      | 3      |
| All other Federal .....            | 801    | 854    | 965    | 1,071  | 1,077  | 1,168  | 1,137  | 989    |
| Institutional support .....        | 3,464  | 3,510  | 3,703  | 3,926  | 3,974  | 3,786  | 3,617  | 3,455  |
| Other outside support, total ..... | 1,401  | 1,421  | 1,477  | 1,551  | 1,482  | 1,424  | 1,441  | 1,467  |
| All other U.S. ....                | 1,181  | 1,213  | 1,277  | 1,293  | 1,276  | 1,270  | 1,213  | 1,226  |
| Foreign .....                      | 220    | 208    | 200    | 258    | 206    | 154    | 228    | 241    |
| Self-support .....                 | 2,449  | 2,409  | 2,509  | 2,796  | 3,312  | 3,316  | 2,980  | 2,590  |
| <b>Other engineering:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 13,276 | 13,406 | 13,785 | 14,199 | 14,014 | 13,924 | 12,931 | 12,170 |
| Federal, total .....               | 3,995  | 4,179  | 4,252  | 4,510  | 4,515  | 4,510  | 4,483  | 4,209  |
| Dept. of Defense .....             | 1,584  | 1,477  | 1,507  | 1,610  | 1,604  | 1,657  | 1,460  | 1,435  |
| Dept. of HHS, total .....          | 231    | 315    | 325    | 308    | 346    | 346    | 337    | 335    |
| NIH .....                          | 216    | 300    | 299    | 295    | 324    | 329    | 305    | 296    |
| Other HHS .....                    | 15     | 15     | 26     | 13     | 22     | 17     | 32     | 39     |
| NSF .....                          | 678    | 752    | 711    | 758    | 798    | 806    | 834    | 807    |
| USDA .....                         | 102    | 102    | 111    | 134    | 157    | 139    | 156    | 149    |
| All other Federal .....            | 1,400  | 1,533  | 1,598  | 1,700  | 1,610  | 1,562  | 1,696  | 1,483  |
| Institutional support .....        | 4,074  | 4,303  | 4,434  | 4,456  | 4,247  | 4,242  | 4,099  | 3,823  |
| Other outside support, total ..... | 2,493  | 2,290  | 2,343  | 2,474  | 2,365  | 2,164  | 1,877  | 1,782  |
| All other U.S. ....                | 1,813  | 1,675  | 1,797  | 1,914  | 1,789  | 1,668  | 1,461  | 1,377  |
| Foreign .....                      | 680    | 615    | 546    | 560    | 576    | 496    | 416    | 405    |
| Self-support .....                 | 2,714  | 2,634  | 2,756  | 2,759  | 2,887  | 3,008  | 2,472  | 2,356  |
| <b>Total, health fields:</b>       |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 7,231  | 7,685  | 8,029  | 8,450  | 9,033  | 9,926  | 10,775 | 11,484 |
| Federal, total .....               | 1,579  | 1,822  | 1,807  | 1,888  | 1,977  | 2,067  | 2,278  | 2,283  |
| Dept. of Defense .....             | 130    | 211    | 192    | 213    | 184    | 198    | 189    | 195    |
| Dept. of HHS, total .....          | 1,094  | 1,195  | 1,268  | 1,328  | 1,372  | 1,422  | 1,525  | 1,544  |
| NIH .....                          | 722    | 746    | 790    | 857    | 950    | 1,040  | 1,092  | 1,089  |
| Other HHS .....                    | 372    | 449    | 478    | 471    | 422    | 382    | 433    | 455    |
| NSF .....                          | 27     | 28     | 27     | 27     | 40     | 53     | 67     | 50     |
| USDA .....                         | 19     | 35     | 34     | 34     | 39     | 40     | 48     | 36     |
| All other Federal .....            | 309    | 353    | 286    | 286    | 342    | 354    | 449    | 458    |
| Institutional support .....        | 2,246  | 2,481  | 2,571  | 2,623  | 2,694  | 2,707  | 2,807  | 3,027  |
| Other outside support, total ..... | 638    | 700    | 716    | 740    | 733    | 775    | 771    | 822    |
| All other U.S. ....                | 371    | 406    | 432    | 487    | 516    | 547    | 556    | 599    |
| Foreign .....                      | 267    | 294    | 284    | 253    | 217    | 228    | 215    | 223    |
| Self-support .....                 | 2,768  | 2,682  | 2,935  | 3,199  | 3,629  | 4,377  | 4,919  | 5,352  |

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support                | 1988   | 1989   | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|--------|--------|---------|---------|---------|---------|---------|---------|
| <b>Total, all surveyed fields:</b>               |        |        |         |         |         |         |         |         |
| Total, all sources .....                         | 95,625 | 99,938 | 106,117 | 113,501 | 121,865 | 128,978 | 134,839 | 138,540 |
| Federal, total .....                             | 17,514 | 18,315 | 19,486  | 21,067  | 22,566  | 23,615  | 24,335  | 24,609  |
| Dept. of Defense .....                           | 1,253  | 1,363  | 1,332   | 1,378   | 1,451   | 1,635   | 1,603   | 1,622   |
| Dept. of HHS, total .....                        | 9,010  | 9,273  | 9,864   | 10,490  | 10,942  | 11,342  | 11,764  | 11,950  |
| NIH .....  | 5,702  | 5,998  | 6,439   | 7,126   | 7,628   | 8,289   | 8,425   | 8,514   |
| Other HHS .....                                  | 3,308  | 3,275  | 3,425   | 3,364   | 3,314   | 3,053   | 3,339   | 3,436   |
| NSF .....  | 2,387  | 2,539  | 2,689   | 2,979   | 3,365   | 3,482   | 3,583   | 3,707   |
| USDA .....                                       | 812    | 876    | 915     | 1,014   | 1,049   | 1,196   | 1,289   | 1,225   |
| All other Federal .....                          | 4,052  | 4,264  | 4,686   | 5,206   | 5,759   | 5,960   | 6,096   | 6,105   |
| Institutional support .....                      | 39,535 | 41,423 | 43,682  | 45,286  | 47,219  | 49,141  | 50,303  | 51,236  |
| Other outside support, total .....               | 6,017  | 6,227  | 6,588   | 6,984   | 7,467   | 7,576   | 8,065   | 8,172   |
| All other U.S. .....                             | 4,787  | 5,030  | 5,376   | 5,663   | 6,131   | 6,400   | 6,765   | 6,781   |
| Foreign .....                                    | 1,230  | 1,197  | 1,212   | 1,321   | 1,336   | 1,176   | 1,300   | 1,391   |
| Self-support .....                               | 32,559 | 33,973 | 36,361  | 40,164  | 44,613  | 48,646  | 52,136  | 54,523  |
| <b>Total, science and engineering:</b>           |        |        |         |         |         |         |         |         |
| Total, all sources .....                         | 78,319 | 81,810 | 86,715  | 92,085  | 98,799  | 103,255 | 106,485 | 107,805 |
| Federal, total .....                             | 12,772 | 13,662 | 14,522  | 15,987  | 17,215  | 18,387  | 18,835  | 18,891  |
| Dept. of Defense .....                           | 1,138  | 1,207  | 1,148   | 1,174   | 1,236   | 1,398   | 1,410   | 1,435   |
| Dept. of HHS, total .....                        | 5,500  | 5,854  | 6,204   | 6,797   | 7,160   | 7,553   | 7,757   | 7,810   |
| NIH .....  | 5,016  | 5,296  | 5,600   | 6,137   | 6,528   | 7,063   | 7,172   | 7,150   |
| Other HHS .....                                  | 484    | 558    | 604     | 660     | 632     | 490     | 585     | 660     |
| NSF .....  | 2,365  | 2,519  | 2,667   | 2,950   | 3,335   | 3,446   | 3,533   | 3,658   |
| USDA .....                                       | 800    | 865    | 891     | 988     | 1,019   | 1,158   | 1,263   | 1,206   |
| All other Federal .....                          | 2,969  | 3,217  | 3,612   | 4,078   | 4,465   | 4,832   | 4,872   | 4,782   |
| Institutional support .....                      | 35,595 | 37,078 | 39,082  | 40,429  | 42,266  | 43,728  | 44,633  | 45,193  |
| Other outside support, total .....               | 5,378  | 5,521  | 5,934   | 6,203   | 6,506   | 6,608   | 6,959   | 6,925   |
| All other U.S. .....                             | 4,277  | 4,510  | 4,903   | 5,090   | 5,413   | 5,647   | 5,902   | 5,842   |
| Foreign .....                                    | 1,101  | 1,031  | 1,113   | 1,093   | 961     | 1,057   | 1,083   |         |
| Self-support .....                               | 24,574 | 25,549 | 27,177  | 29,466  | 32,812  | 34,532  | 36,058  | 36,796  |
| <b>Sciences, total:</b>                          |        |        |         |         |         |         |         |         |
| Total, all sources .....                         | 70,700 | 73,674 | 78,017  | 82,402  | 88,135  | 92,056  | 94,908  | 96,267  |
| Federal, total .....                             | 11,258 | 11,971 | 12,586  | 13,709  | 14,673  | 15,771  | 16,184  | 16,265  |
| Dept. of Defense .....                           | 759    | 756    | 701     | 690     | 727     | 829     | 905     | 878     |
| Dept. of HHS, total .....                        | 5,371  | 5,693  | 6,040   | 6,581   | 6,935   | 7,317   | 7,537   | 7,584   |
| NIH .....  | 4,904  | 5,159  | 5,463   | 5,946   | 6,324   | 6,857   | 6,973   | 6,957   |
| Other HHS .....                                  | 467    | 534    | 577     | 635     | 611     | 460     | 564     | 627     |
| NSF .....  | 1,927  | 2,060  | 2,075   | 2,244   | 2,461   | 2,602   | 2,650   | 2,781   |
| USDA .....                                       | 779    | 843    | 864     | 952     | 966     | 1,096   | 1,193   | 1,144   |
| All other Federal .....                          | 2,422  | 2,619  | 2,906   | 3,242   | 3,584   | 3,927   | 3,899   | 3,878   |
| Institutional support .....                      | 32,816 | 34,080 | 35,890  | 37,033  | 38,583  | 39,755  | 40,461  | 40,976  |
| Other outside support, total .....               | 4,202  | 4,326  | 4,595   | 4,813   | 5,087   | 5,232   | 5,644   | 5,551   |
| All other U.S. .....                             | 3,244  | 3,459  | 3,725   | 3,872   | 4,157   | 4,424   | 4,757   | 4,643   |
| Foreign .....                                    | 958    | 867    | 870     | 941     | 930     | 808     | 887     | 908     |
| Self-support .....                               | 22,424 | 23,297 | 24,946  | 26,847  | 29,792  | 31,298  | 32,619  | 33,475  |
| <b>Physical sciences:</b>                        |        |        |         |         |         |         |         |         |
| Total, all sources .....                         | 6,366  | 6,660  | 6,821   | 7,272   | 7,500   | 7,723   | 7,766   | 7,660   |
| Federal, total .....                             | 1,999  | 2,129  | 2,204   | 2,393   | 2,486   | 2,684   | 2,603   | 2,511   |
| Dept. of Defense .....                           | 233    | 225    | 189     | 207     | 192     | 206     | 232     | 205     |
| Dept. of HHS, total .....                        | 628    | 649    | 658     | 654     | 704     | 738     | 762     | 713     |
| NIH .....  | 590    | 621    | 619     | 598     | 654     | 699     | 719     | 665     |
| Other HHS .....                                  | 38     | 28     | 39      | 56      | 50      | 39      | 43      | 48      |
| NSF .....  | 691    | 716    | 709     | 716     | 772     | 810     | 790     | 813     |
| USDA .....                                       | 11     | 8      | 12      | 16      | 19      | 18      | 8       | 7       |
| All other Federal .....                          | 436    | 531    | 636     | 800     | 799     | 912     | 811     | 773     |
| Institutional support .....                      | 3,625  | 3,755  | 3,754   | 3,908   | 3,997   | 4,000   | 4,149   | 4,149   |
| Other outside support, total .....               | 345    | 410    | 458     | 522     | 572     | 580     | 549     | 540     |
| All other U.S. .....                             | 308    | 370    | 410     | 479     | 522     | 528     | 496     | 487     |
| Foreign .....                                    | 37     | 40     | 48      | 43      | 50      | 52      | 53      | 53      |
| Self-support .....                               | 397    | 366    | 405     | 449     | 445     | 459     | 465     | 460     |
| <b>Earth, atmospheric, &amp; ocean sciences:</b> |        |        |         |         |         |         |         |         |
| Total, all sources .....                         | 2,748  | 2,753  | 2,927   | 3,176   | 3,398   | 3,552   | 3,794   | 3,901   |
| Federal, total .....                             | 702    | 753    | 795     | 881     | 1,036   | 1,108   | 1,119   | 1,112   |
| Dept. of Defense .....                           | 74     | 95     | 95      | 95      | 111     | 125     | 127     | 103     |
| Dept. of HHS, total .....                        | 18     | 8      | 16      | 22      | 21      | 18      | 17      | 11      |
| NIH .....  | 6      | 6      | 9       | 7       | 20      | 15      | 17      | 10      |
| Other HHS .....                                  | 12     | 2      | 7       | 15      | 1       | 3       | 0       | 1       |
| NSF .....  | 302    | 310    | 318     | 367     | 395     | 413     | 435     | 459     |
| USDA .....                                       | 17     | 15     | 23      | 21      | 29      | 24      | 20      | 21      |
| All other Federal .....                          | 291    | 325    | 343     | 376     | 480     | 528     | 520     | 518     |
| Institutional support .....                      | 1,209  | 1,234  | 1,255   | 1,338   | 1,380   | 1,427   | 1,508   | 1,623   |
| Other outside support, total .....               | 216    | 217    | 227     | 250     | 242     | 222     | 282     | 283     |
| All other U.S. .....                             | 168    | 175    | 178     | 194     | 200     | 191     | 234     | 241     |
| Foreign .....                                    | 48     | 42     | 49      | 56      | 42      | 31      | 48      | 42      |
| Self-support .....                               | 621    | 549    | 650     | 707     | 740     | 795     | 885     | 883     |

See explanatory information, if any, and SOURCE at end of table.

**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mathematical sciences:</b>      |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 3,718  | 3,935  | 4,044  | 4,221  | 4,429  | 4,434  | 4,416  | 4,203  |
| Federal, total .....               | 218    | 283    | 298    | 323    | 351    | 353    | 366    | 316    |
| Dept. of Defense .....             | 77     | 101    | 83     | 42     | 59     | 55     | 48     | 42     |
| Dept. of HHS, total .....          | 7      | 15     | 21     | 23     | 19     | 17     | 14     | 20     |
| NIH .....                          | 6      | 9      | 18     | 19     | 16     | 16     | 13     | 13     |
| Other HHS .....                    | 1      | 6      | 3      | 4      | 3      | 1      | 1      | 7      |
| NSF .....                          | 85     | 82     | 79     | 90     | 110    | 118    | 144    | 143    |
| USDA .....                         | 8      | 8      | 7      | 5      | 8      | 11     | 7      | 3      |
| All other Federal .....            | 41     | 77     | 108    | 163    | 155    | 152    | 153    | 108    |
| Institutional support .....        | 2,634  | 2,761  | 2,878  | 2,880  | 2,927  | 2,834  | 2,861  | 2,822  |
| Other outside support, total ..... | 114    | 117    | 101    | 154    | 154    | 149    | 165    | 138    |
| All other U.S. ....                | 66     | 75     | 68     | 104    | 102    | 107    | 120    | 93     |
| Foreign .....                      | 48     | 42     | 33     | 50     | 52     | 42     | 45     | 45     |
| Self-support .....                 | 752    | 774    | 767    | 864    | 997    | 1,098  | 1,024  | 927    |
| <b>Computer sciences:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 3,338  | 3,251  | 3,471  | 3,481  | 3,559  | 3,594  | 3,559  | 3,665  |
| Federal, total .....               | 310    | 355    | 345    | 341    | 398    | 492    | 517    | 546    |
| Dept. of Defense .....             | 173    | 180    | 149    | 141    | 169    | 195    | 211    | 205    |
| Dept. of HHS, total .....          | 5      | 12     | 21     | 15     | 21     | 23     | 22     | 25     |
| NIH .....                          | 5      | 12     | 19     | 12     | 20     | 21     | 20     | 17     |
| Other HHS .....                    | 0      | 0      | 2      | 3      | 1      | 2      | 2      | 8      |
| NSF .....                          | 80     | 109    | 117    | 114    | 135    | 187    | 180    | 193    |
| USDA .....                         | 0      | 0      | 2      | 1      | 0      | 2      | 3      | 3      |
| All other Federal .....            | 52     | 54     | 56     | 70     | 73     | 85     | 101    | 120    |
| Institutional support .....        | 1,068  | 1,023  | 1,131  | 1,060  | 1,105  | 1,092  | 1,121  | 1,178  |
| Other outside support, total ..... | 276    | 230    | 237    | 251    | 236    | 278    | 248    | 281    |
| All other U.S. ....                | 212    | 172    | 175    | 181    | 185    | 229    | 209    | 240    |
| Foreign .....                      | 64     | 58     | 62     | 70     | 51     | 49     | 39     | 41     |
| Self-support .....                 | 1,684  | 1,643  | 1,758  | 1,829  | 1,820  | 1,732  | 1,673  | 1,660  |
| <b>Agricultural sciences:</b>      |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 2,482  | 2,513  | 2,646  | 2,865  | 2,998  | 3,187  | 3,326  | 3,456  |
| Federal, total .....               | 415    | 437    | 497    | 532    | 577    | 661    | 686    | 736    |
| Dept. of Defense .....             | 5      | 3      | 6      | 8      | 3      | 10     | 9      | 8      |
| Dept. of HHS, total .....          | 11     | 12     | 11     | 10     | 8      | 12     | 18     | 9      |
| NIH .....                          | 11     | 5      | 11     | 6      | 8      | 12     | 18     | 6      |
| Other HHS .....                    | 0      | 7      | 0      | 4      | 0      | 0      | 0      | 3      |
| NSF .....                          | 14     | 13     | 20     | 26     | 33     | 32     | 34     | 34     |
| USDA .....                         | 233    | 287    | 286    | 325    | 329    | 390    | 419    | 438    |
| All other Federal .....            | 152    | 122    | 174    | 163    | 204    | 217    | 206    | 247    |
| Institutional support .....        | 1,051  | 1,055  | 1,041  | 1,197  | 1,242  | 1,290  | 1,413  | 1,384  |
| Other outside support, total ..... | 350    | 358    | 409    | 404    | 452    | 473    | 446    | 441    |
| All other U.S. ....                | 238    | 252    | 299    | 292    | 347    | 382    | 382    | 365    |
| Foreign .....                      | 112    | 106    | 110    | 112    | 105    | 91     | 64     | 76     |
| Self-support .....                 | 666    | 663    | 699    | 732    | 727    | 763    | 781    | 895    |
| <b>Biological sciences:</b>        |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 16,805 | 17,612 | 18,156 | 19,202 | 20,159 | 21,561 | 22,524 | 22,999 |
| Federal, total .....               | 5,279  | 5,688  | 5,910  | 6,406  | 6,784  | 7,349  | 7,653  | 7,706  |
| Dept. of Defense .....             | 100    | 87     | 87     | 78     | 91     | 110    | 134    | 162    |
| Dept. of HHS, total .....          | 3,833  | 4,143  | 4,387  | 4,795  | 5,040  | 5,340  | 5,552  | 5,631  |
| NIH .....                          | 3,696  | 3,972  | 4,214  | 4,594  | 4,830  | 5,177  | 5,295  | 5,302  |
| Other HHS .....                    | 137    | 171    | 173    | 201    | 210    | 163    | 257    | 329    |
| NSF .....                          | 464    | 542    | 495    | 552    | 584    | 611    | 593    | 655    |
| USDA .....                         | 415    | 406    | 409    | 451    | 451    | 510    | 565    | 492    |
| All other Federal .....            | 467    | 510    | 532    | 530    | 618    | 778    | 809    | 766    |
| Institutional support .....        | 7,789  | 8,175  | 8,460  | 8,691  | 9,062  | 9,431  | 9,679  | 9,771  |
| Other outside support, total ..... | 1,295  | 1,324  | 1,462  | 1,499  | 1,444  | 1,569  | 1,766  | 1,762  |
| All other U.S. ....                | 1,045  | 1,102  | 1,241  | 1,273  | 1,258  | 1,392  | 1,544  | 1,533  |
| Foreign .....                      | 250    | 222    | 221    | 226    | 186    | 177    | 222    | 229    |
| Self-support .....                 | 2,442  | 2,425  | 2,324  | 2,606  | 2,869  | 3,212  | 3,426  | 3,760  |
| <b>Psychology:</b>                 |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 17,919 | 18,881 | 19,977 | 21,301 | 23,061 | 23,665 | 24,247 | 24,646 |
| Federal, total .....               | 1,255  | 1,228  | 1,380  | 1,532  | 1,609  | 1,651  | 1,680  | 1,686  |
| Dept. of Defense .....             | 62     | 43     | 57     | 70     | 61     | 70     | 85     | 92     |
| Dept. of HHS, total .....          | 680    | 677    | 752    | 838    | 867    | 902    | 899    | 879    |
| NIH .....                          | 462    | 419    | 461    | 550    | 591    | 723    | 719    | 730    |
| Other HHS .....                    | 218    | 258    | 291    | 288    | 276    | 179    | 180    | 149    |
| NSF .....                          | 126    | 127    | 159    | 161    | 158    | 177    | 166    | 174    |
| USDA .....                         | 20     | 22     | 26     | 14     | 14     | 7      | 20     | 11     |
| All other Federal .....            | 367    | 359    | 386    | 449    | 509    | 495    | 510    | 530    |
| Institutional support .....        | 6,918  | 7,314  | 7,708  | 7,956  | 8,396  | 8,708  | 8,589  | 8,573  |
| Other outside support, total ..... | 603    | 688    | 680    | 673    | 693    | 696    | 768    | 756    |
| All other U.S. ....                | 571    | 656    | 653    | 643    | 663    | 673    | 727    | 727    |
| Foreign .....                      | 32     | 32     | 27     | 30     | 30     | 23     | 41     | 29     |
| Self-support .....                 | 9,143  | 9,651  | 10,209 | 11,140 | 12,363 | 12,610 | 13,210 | 13,631 |

See explanatory information, if any, and SOURCE at end of table.

**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Social sciences:</b>            |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 17,324 | 18,069 | 19,975 | 20,884 | 23,031 | 24,340 | 25,276 | 25,737 |
| Federal, total .....               | 1,080  | 1,098  | 1,157  | 1,301  | 1,432  | 1,473  | 1,560  | 1,652  |
| Dept. of Defense .....             | 35     | 22     | 35     | 49     | 41     | 58     | 59     | 61     |
| Dept. of HHS, total .....          | 189    | 177    | 174    | 224    | 255    | 267    | 253    | 296    |
| NIH .....                          | 128    | 115    | 112    | 160    | 185    | 194    | 172    | 214    |
| Other HHS .....                    | 61     | 62     | 62     | 64     | 70     | 73     | 81     | 82     |
| NSF .....                          | 165    | 161    | 178    | 218    | 274    | 254    | 308    | 310    |
| USDA .....                         | 75     | 97     | 99     | 119    | 116    | 134    | 151    | 169    |
| All other Federal .....            | 616    | 641    | 671    | 691    | 746    | 760    | 789    | 816    |
| Institutional support .....        | 8,522  | 8,763  | 9,663  | 10,003 | 10,474 | 10,973 | 11,141 | 11,476 |
| Other outside support, total ..... | 1,003  | 982    | 1,021  | 1,060  | 1,294  | 1,265  | 1,420  | 1,350  |
| All other U.S. ....                | 636    | 657    | 701    | 706    | 880    | 922    | 1,045  | 957    |
| Foreign .....                      | 367    | 325    | 320    | 354    | 414    | 343    | 375    | 393    |
| Self-support .....                 | 6,719  | 7,226  | 8,134  | 8,520  | 9,831  | 10,629 | 11,155 | 11,259 |
| <b>Engineering, total:</b>         |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 7,619  | 8,136  | 8,698  | 9,683  | 10,664 | 11,199 | 11,577 | 11,538 |
| Federal, total .....               | 1,514  | 1,691  | 1,936  | 2,278  | 2,542  | 2,616  | 2,651  | 2,626  |
| Dept. of Defense .....             | 379    | 451    | 447    | 484    | 509    | 569    | 505    | 557    |
| Dept. of HHS, total .....          | 129    | 161    | 164    | 216    | 225    | 236    | 220    | 226    |
| NIH .....                          | 112    | 137    | 137    | 191    | 204    | 206    | 199    | 193    |
| Other HHS .....                    | 17     | 24     | 27     | 25     | 21     | 30     | 21     | 33     |
| NSF .....                          | 438    | 459    | 592    | 706    | 874    | 844    | 883    | 877    |
| USDA .....                         | 21     | 22     | 27     | 36     | 53     | 62     | 70     | 62     |
| All other Federal .....            | 547    | 598    | 706    | 836    | 881    | 905    | 973    | 904    |
| Institutional support .....        | 2,779  | 2,998  | 3,192  | 3,396  | 3,683  | 3,973  | 4,172  | 4,217  |
| Other outside support, total ..... | 1,176  | 1,195  | 1,339  | 1,390  | 1,419  | 1,376  | 1,315  | 1,374  |
| All other U.S. ....                | 1,033  | 1,051  | 1,178  | 1,218  | 1,256  | 1,223  | 1,145  | 1,199  |
| Foreign .....                      | 143    | 144    | 161    | 172    | 163    | 153    | 170    | 175    |
| Self-support .....                 | 2,150  | 2,252  | 2,231  | 2,619  | 3,020  | 3,234  | 3,439  | 3,321  |
| <b>Chemical engineering:</b>       |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 792    | 796    | 896    | 985    | 1,097  | 1,166  | 1,193  | 1,220  |
| Federal, total .....               | 202    | 230    | 280    | 311    | 332    | 369    | 364    | 348    |
| Dept. of Defense .....             | 13     | 20     | 8      | 16     | 19     | 31     | 18     | 24     |
| Dept. of HHS, total .....          | 14     | 20     | 28     | 33     | 43     | 39     | 48     | 38     |
| NIH .....                          | 14     | 20     | 26     | 33     | 39     | 36     | 44     | 36     |
| Other HHS .....                    | 0      | 0      | 2      | 0      | 4      | 3      | 4      | 2      |
| NSF .....                          | 102    | 97     | 125    | 133    | 156    | 161    | 176    | 167    |
| USDA .....                         | 0      | 0      | 4      | 1      | 3      | 16     | 15     | 12     |
| All other Federal .....            | 73     | 93     | 115    | 128    | 111    | 122    | 107    | 107    |
| Institutional support .....        | 325    | 304    | 344    | 350    | 416    | 470    | 460    | 460    |
| Other outside support, total ..... | 172    | 171    | 187    | 218    | 213    | 205    | 210    | 238    |
| All other U.S. ....                | 160    | 163    | 178    | 200    | 198    | 189    | 197    | 203    |
| Foreign .....                      | 12     | 8      | 9      | 18     | 15     | 16     | 13     | 35     |
| Self-support .....                 | 93     | 91     | 85     | 106    | 136    | 122    | 159    | 174    |
| <b>Civil engineering:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 1,565  | 1,649  | 1,781  | 2,019  | 2,328  | 2,524  | 2,786  | 2,817  |
| Federal, total .....               | 202    | 204    | 244    | 300    | 381    | 369    | 444    | 453    |
| Dept. of Defense .....             | 31     | 36     | 27     | 30     | 43     | 45     | 60     | 58     |
| Dept. of HHS, total .....          | 2      | 7      | 5      | 9      | 16     | 6      | 13     | 15     |
| NIH .....                          | 2      | 7      | 4      | 9      | 16     | 6      | 13     | 14     |
| Other HHS .....                    | 0      | 0      | 1      | 0      | 0      | 0      | 0      | 1      |
| NSF .....                          | 49     | 46     | 75     | 82     | 100    | 112    | 122    | 131    |
| USDA .....                         | 5      | 6      | 6      | 10     | 17     | 13     | 13     | 9      |
| All other Federal .....            | 115    | 109    | 131    | 169    | 205    | 193    | 236    | 240    |
| Institutional support .....        | 613    | 635    | 685    | 703    | 818    | 977    | 1,079  | 1,155  |
| Other outside support, total ..... | 171    | 178    | 220    | 239    | 260    | 238    | 209    | 232    |
| All other U.S. ....                | 135    | 128    | 174    | 199    | 216    | 216    | 178    | 199    |
| Foreign .....                      | 36     | 50     | 46     | 40     | 44     | 22     | 31     | 33     |
| Self-support .....                 | 579    | 632    | 632    | 777    | 869    | 940    | 1,054  | 977    |
| <b>Electrical engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 1,682  | 1,822  | 1,956  | 2,165  | 2,426  | 2,444  | 2,391  | 2,468  |
| Federal, total .....               | 283    | 349    | 398    | 451    | 552    | 517    | 491    | 507    |
| Dept. of Defense .....             | 97     | 152    | 140    | 154    | 172    | 188    | 151    | 178    |
| Dept. of HHS, total .....          | 11     | 7      | 11     | 18     | 19     | 17     | 17     | 18     |
| NIH .....                          | 9      | 4      | 9      | 16     | 16     | 13     | 15     | 12     |
| Other HHS .....                    | 2      | 3      | 2      | 2      | 3      | 4      | 2      | 6      |
| NSF .....                          | 124    | 117    | 154    | 175    | 226    | 190    | 201    | 204    |
| USDA .....                         | 0      | 1      | 2      | 0      | 0      | 2      | 5      | 4      |
| All other Federal .....            | 51     | 72     | 91     | 104    | 135    | 120    | 117    | 103    |
| Institutional support .....        | 581    | 648    | 702    | 706    | 774    | 812    | 826    | 813    |
| Other outside support, total ..... | 276    | 284    | 323    | 349    | 323    | 306    | 270    | 289    |
| All other U.S. ....                | 246    | 252    | 277    | 314    | 292    | 280    | 245    | 261    |
| Foreign .....                      | 30     | 32     | 46     | 35     | 31     | 26     | 25     | 28     |
| Self-support .....                 | 542    | 541    | 533    | 659    | 777    | 809    | 804    | 859    |

See explanatory information, if any, and SOURCE at end of table.

**Table 28. Female full-time graduate students in science, engineering, and health fields in all institutions,  
by field and source of major support: 1988-95**

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| Field and source of major support  | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Industrial engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 736    | 907    | 908    | 1,042  | 1,175  | 1,173  | 1,298  | 1,170  |
| Federal, total .....               | 94     | 92     | 102    | 137    | 150    | 148    | 129    | 137    |
| Dept. of Defense .....             | 38     | 45     | 47     | 36     | 43     | 38     | 24     | 31     |
| Dept. of HHS, total .....          | 12     | 13     | 17     | 16     | 20     | 28     | 11     | 23     |
| NIH .....                          | 4      | 2      | 6      | 5      | 12     | 14     | 4      | 8      |
| Other HHS .....                    | 8      | 11     | 11     | 11     | 8      | 14     | 7      | 15     |
| NSF .....                          | 20     | 17     | 14     | 41     | 45     | 37     | 39     | 36     |
| USDA .....                         | 0      | 0      | 0      | 1      | 1      | 1      | 0      | 0      |
| All other Federal .....            | 24     | 17     | 24     | 43     | 41     | 44     | 55     | 47     |
| Institutional support .....        | 260    | 343    | 346    | 387    | 403    | 377    | 416    | 438    |
| Other outside support, total ..... | 86     | 85     | 85     | 70     | 88     | 90     | 115    | 78     |
| All other U.S. ....                | 73     | 69     | 74     | 59     | 79     | 75     | 92     | 75     |
| Foreign .....                      | 13     | 16     | 11     | 11     | 9      | 15     | 23     | 3      |
| Self-support .....                 | 296    | 387    | 375    | 448    | 534    | 558    | 638    | 517    |
| <b>Mechanical engineering:</b>     |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 835    | 855    | 848    | 942    | 1,086  | 1,185  | 1,217  | 1,131  |
| Federal, total .....               | 168    | 188    | 202    | 258    | 261    | 315    | 326    | 297    |
| Dept. of Defense .....             | 54     | 54     | 48     | 57     | 52     | 62     | 68     | 63     |
| Dept. of HHS, total .....          | 14     | 16     | 10     | 13     | 11     | 14     | 10     | 13     |
| NIH .....                          | 12     | 13     | 10     | 8      | 11     | 13     | 8      | 11     |
| Other HHS .....                    | 2      | 3      | 0      | 5      | 0      | 1      | 2      | 2      |
| NSF .....                          | 32     | 47     | 61     | 96     | 110    | 111    | 109    | 96     |
| USDA .....                         | 0      | 1      | 1      | 3      | 4      | 1      | 2      | 1      |
| All other Federal .....            | 68     | 70     | 82     | 89     | 84     | 127    | 137    | 124    |
| Institutional support .....        | 319    | 344    | 340    | 361    | 426    | 445    | 469    | 441    |
| Other outside support, total ..... | 135    | 121    | 122    | 135    | 136    | 137    | 132    | 139    |
| All other U.S. ....                | 122    | 114    | 106    | 122    | 125    | 121    | 120    | 126    |
| Foreign .....                      | 13     | 7      | 16     | 13     | 11     | 16     | 12     | 13     |
| Self-support .....                 | 213    | 202    | 184    | 188    | 263    | 288    | 290    | 254    |
| <b>Other engineering:</b>          |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 2,009  | 2,107  | 2,309  | 2,530  | 2,552  | 2,707  | 2,692  | 2,732  |
| Federal, total .....               | 565    | 628    | 710    | 821    | 866    | 898    | 897    | 884    |
| Dept. of Defense .....             | 146    | 144    | 177    | 191    | 180    | 205    | 184    | 203    |
| Dept. of HHS, total .....          | 76     | 98     | 93     | 127    | 116    | 132    | 121    | 119    |
| NIH .....                          | 71     | 91     | 82     | 120    | 110    | 124    | 115    | 112    |
| Other HHS .....                    | 5      | 7      | 11     | 7      | 6      | 8      | 6      | 7      |
| NSF .....                          | 111    | 135    | 163    | 179    | 237    | 233    | 236    | 243    |
| USDA .....                         | 16     | 14     | 14     | 21     | 28     | 29     | 35     | 36     |
| All other Federal .....            | 216    | 237    | 263    | 303    | 305    | 299    | 321    | 283    |
| Institutional support .....        | 681    | 724    | 775    | 889    | 846    | 892    | 922    | 910    |
| Other outside support, total ..... | 336    | 356    | 402    | 379    | 399    | 400    | 379    | 398    |
| All other U.S. ....                | 297    | 325    | 369    | 324    | 346    | 342    | 313    | 335    |
| Foreign .....                      | 39     | 31     | 33     | 55     | 53     | 58     | 66     | 63     |
| Self-support .....                 | 427    | 399    | 422    | 441    | 441    | 517    | 494    | 540    |
| <b>Total, health fields:</b>       |        |        |        |        |        |        |        |        |
| Total, all sources .....           | 17,306 | 18,128 | 19,402 | 21,416 | 23,066 | 25,723 | 28,354 | 30,735 |
| Federal, total .....               | 4,742  | 4,653  | 4,964  | 5,080  | 5,351  | 5,228  | 5,500  | 5,718  |
| Dept. of Defense .....             | 115    | 156    | 184    | 204    | 215    | 237    | 193    | 187    |
| Dept. of HHS, total .....          | 3,510  | 3,419  | 3,660  | 3,693  | 3,782  | 3,789  | 4,007  | 4,140  |
| NIH .....                          | 686    | 702    | 839    | 989    | 1,100  | 1,226  | 1,253  | 1,364  |
| Other HHS .....                    | 2,824  | 2,717  | 2,821  | 2,704  | 2,682  | 2,563  | 2,754  | 2,776  |
| NSF .....                          | 22     | 20     | 22     | 29     | 30     | 36     | 50     | 49     |
| USDA .....                         | 12     | 11     | 24     | 26     | 30     | 38     | 26     | 19     |
| All other Federal .....            | 1,083  | 1,047  | 1,074  | 1,128  | 1,294  | 1,128  | 1,224  | 1,323  |
| Institutional support .....        | 3,940  | 4,345  | 4,600  | 4,857  | 4,953  | 5,413  | 5,670  | 6,043  |
| Other outside support, total ..... | 639    | 706    | 654    | 781    | 961    | 968    | 1,106  | 1,247  |
| All other U.S. ....                | 510    | 520    | 473    | 573    | 718    | 753    | 863    | 939    |
| Foreign .....                      | 129    | 186    | 181    | 208    | 243    | 215    | 243    | 308    |
| Self-support .....                 | 7,985  | 8,424  | 9,184  | 10,698 | 11,801 | 14,114 | 16,078 | 17,727 |

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 29. Graduate students in science, engineering, and health fields  
in doctorate-granting institutions, by field: 1975-95**

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| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |                  |                    |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------------|--------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology       | Social<br>sciences |
| 1975 .....                 | 272,123                                   | 206,445                 | 24,965                 | 10,840   | 14,850                        | 7,454                     | 10,206   | 41,851                 | 28,718           | 67,561             |
| 1976 .....                 | 273,748                                   | 209,870                 | 25,249                 | 11,634   | 15,252                        | 7,652                     | 10,741   | 42,917                 | 29,769           | 66,656             |
| 1977 .....                 | 276,386                                   | 211,235                 | 25,299                 | 12,231   | 14,331                        | 7,979                     | 11,106   | 44,323                 | 29,617           | 66,349             |
| 1978 <sup>1</sup> .....    | 267,507                                   | 203,746                 | 24,714                 | 12,066   | 13,194                        | 8,329                     | 11,225   | 42,919                 | 27,892           | 63,407             |
| 1979 .....                 | 280,891                                   | 213,527                 | 25,139                 | 12,546   | 13,504                        | 9,787                     | 11,524   | 43,121                 | 29,495           | 68,411             |
| 1980 .....                 | 287,911                                   | 218,269                 | 25,495                 | 12,678   | 13,801                        | 11,528                    | 11,803   | 42,795                 | 30,756           | 69,413             |
| 1981 .....                 | 293,318                                   | 219,190                 | 25,941                 | 12,997   | 14,180                        | 13,361                    | 11,656   | 42,017                 | 30,713           | 68,325             |
| 1982 .....                 | 299,922                                   | 221,993                 | 26,670                 | 13,703   | 14,920                        | 15,642                    | 11,893   | 41,787                 | 30,767           | 66,611             |
| 1983 .....                 | 306,908                                   | 221,577                 | 27,917                 | 14,276   | 15,040                        | 18,212                    | 11,707   | 41,347                 | 30,942           | 62,136             |
| 1984 .....                 | 308,470                                   | 221,483                 | 28,532                 | 14,252   | 15,175                        | 20,653                    | 11,550   | 41,674                 | 30,703           | 58,944             |
| 1985 .....                 | 317,150                                   | 226,938                 | 29,443                 | 14,148   | 15,398                        | 24,181                    | 10,874   | 42,203                 | 30,760           | 59,931             |
| 1986 .....                 | 326,556                                   | 231,109                 | 30,600                 | 13,936   | 15,832                        | 25,449                    | 10,815   | 43,050                 | 31,281           | 60,146             |
| 1987 .....                 | 331,616                                   | 234,561                 | 31,142                 | 13,257   | 16,382                        | 26,239                    | 10,470   | 43,172                 | 32,313           | 61,586             |
| 1988 .....                 | 335,602                                   | 239,007                 | 31,425                 | 12,784   | 17,110                        | 26,671                    | 10,453   | 44,167                 | 33,639           | 62,758             |
| 1989 .....                 | 340,612                                   | 243,249                 | 31,974                 | 12,594   | 17,106                        | 26,760                    | 10,524   | 45,243                 | 34,360           | 64,688             |
| 1990 .....                 | 351,146                                   | 251,347                 | 32,464                 | 12,852   | 17,516                        | 27,985                    | 10,607   | 46,377                 | 35,820           | 67,726             |
| 1991 .....                 | 364,071                                   | 258,810                 | 32,941                 | 13,158   | 17,855                        | 28,223                    | 10,796   | 48,103                 | 37,766           | 69,968             |
| 1992 .....                 | 379,403                                   | 270,245                 | 33,636                 | 13,767   | 18,165                        | 29,718                    | 11,129   | 50,204                 | 39,258           | 74,368             |
| 1993 .....                 | 383,514                                   | 275,069                 | 33,523                 | 14,044   | 17,695                        | 30,127                    | 11,168   | 52,043                 | 39,481           | 76,988             |
| 1994 .....                 | 380,350                                   | 275,116                 | 32,709                 | 14,220   | 17,380                        | 28,818                    | 11,458   | 53,605                 | 39,688           | 77,238             |
| 1995 .....                 | 372,506                                   | 272,554                 | 31,795                 | 14,034   | 16,354                        | 28,140                    | 11,635   | 53,882                 | 39,365           | 77,349             |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |                  |                    |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering | Health<br>fields |                    |
| 1975 .....                 | 65,678                                    | 1,636                   | 4,916                  | 12,028   | 15,956                        | 11,172                    | 8,273  | 2,313                  | 9,384            | 23,023             |
| 1976 .....                 | 63,878                                    | 1,449                   | 5,070                  | 11,414   | 15,542                        | 10,238                    | 8,017  | 2,333                  | 9,815            | 25,191             |
| 1977 .....                 | 65,151                                    | 1,496                   | 5,071                  | 11,570   | 16,690                        | 9,914                     | 8,315  | 2,491                  | 9,604            | 29,995             |
| 1978 <sup>1</sup> .....    | 63,761                                    | 1,450                   | 5,184                  | 11,565   | 16,379                        | 8,967                     | 8,122  | 2,487                  | 9,607            | 31,431             |
| 1979 .....                 | 67,364                                    | 1,476                   | 5,420                  | 11,992   | 16,942                        | 10,177                    | 8,629  | 2,656                  | 10,072           | 33,845             |
| 1980 .....                 | 69,642                                    | 1,730                   | 5,768                  | 12,196   | 18,183                        | 8,981                     | 9,234  | 2,839                  | 10,711           | 36,292             |
| 1981 .....                 | 74,128                                    | 1,876                   | 6,223                  | 12,958   | 19,059                        | 8,959                     | 9,987  | 3,064                  | 12,002           | 37,724             |
| 1982 .....                 | 77,929                                    | 1,933                   | 6,894                  | 13,192   | 20,709                        | 8,779                     | 10,835   | 3,056                  | 12,531           | 37,220             |
| 1983 .....                 | 85,331                                    | 2,273                   | 7,311                  | 14,054   | 23,958                        | 8,546                     | 12,204   | 3,373                  | 13,612           | 37,015             |
| 1984 .....                 | 86,987                                    | 2,308                   | 7,162                  | 14,426   | 25,007                        | 8,655                     | 13,050   | 3,593                  | 12,786           | 37,955             |
| 1985 .....                 | 90,212                                    | 2,506                   | 6,987                  | 14,168   | 26,748                        | 9,811                     | 13,341   | 3,859                  | 12,792           | 38,668             |
| 1986 .....                 | 95,447                                    | 2,771                   | 6,834                  | 14,117   | 28,162                        | 10,791                    | 14,687   | 4,107                  | 13,978           | 40,112             |
| 1987 .....                 | 97,055                                    | 2,980                   | 6,934                  | 13,550   | 29,418                        | 11,413                    | 15,293   | 4,272                  | 13,195           | 40,514             |
| 1988 .....                 | 96,595                                    | 3,186                   | 6,484                  | 13,836   | 30,100                        | 10,656                    | 15,108   | 4,257                  | 12,968           | 42,010             |
| 1989 .....                 | 97,363                                    | 3,457                   | 6,356                  | 14,016   | 30,665                        | 10,162                    | 15,175   | 4,510                  | 13,022           | 44,188             |
| 1990 .....                 | 99,799                                    | 3,843                   | 6,599                  | 14,515   | 30,645                        | 10,091                    | 15,669   | 4,836                  | 13,601           | 47,062             |
| 1991 .....                 | 105,261                                   | 4,053                   | 6,975                  | 16,115   | 32,003                        | 11,463                    | 16,615   | 5,035                  | 13,002           | 49,499             |
| 1992 .....                 | 109,158                                   | 3,999                   | 7,226                  | 17,967   | 33,024                        | 12,319                    | 17,459   | 5,353                  | 11,811           | 53,028             |
| 1993 .....                 | 108,445                                   | 3,905                   | 7,358                  | 17,945   | 32,201                        | 12,425                    | 17,404   | 5,216                  | 11,991           | 56,957             |
| 1994 .....                 | 105,234                                   | 3,653                   | 7,469                  | 18,344   | 30,178                        | 12,566                    | 16,842   | 5,071                  | 11,111           | 60,814             |
| 1995 .....                 | 99,952                                    | 3,287                   | 7,291                  | 17,744   | 28,228                        | 11,964                    | 15,585   | 4,821                  | 11,032           | 63,822             |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 30. Graduate students in science, engineering, and health fields  
in master's-granting institutions, by field: 1975-95**

Page 1 of 1

| Year                       | Total,<br>science<br>and engi-<br>neering | Sciences                |                        |  |                               |                           |  |                        |            |                    | Health<br>fields |
|----------------------------|---|-------------------------|------------------------|--|-------------------------------|---------------------------|--|------------------------|------------|--------------------|------------------|
|                            |   | Sciences,<br>total      | Physical<br>sciences   | Earth,<br>atmos-<br>pheric, &<br>ocean<br>sciences | Math-<br>ematical<br>sciences | Computer<br>sciences      | Agricul-<br>tural<br>sciences                    | Biological<br>sciences | Psychology | Social<br>sciences |                  |
| 1975 .....                 | 31,067                                    | 28,474                  | 1,345                  | 1,239  | 2,042                         | 961                       | 496  | 4,547                  | 7,473      | 10,371             |                  |
| 1976 .....                 | 31,786                                    | 29,007                  | 1,382                  | 1,185  | 1,819                         | 975                       | 544  | 4,811                  | 7,689      | 10,602             |                  |
| 1977 .....                 | 35,430                                    | 31,896                  | 1,556                  | 1,224  | 1,721                         | 1,129                     | 571  | 4,911                  | 9,000      | 11,784             |                  |
| 1978 <sup>1</sup> .....    | 36,843                                    | 32,907                  | 1,560                  | 1,210  | 1,618                         | 1,518                     | 644  | 5,004                  | 9,630      | 11,723             |                  |
| 1979 .....                 | 38,280                                    | 33,916                  | 1,556                  | 1,191  | 1,527                         | 1,903                     | 716  | 5,078                  | 10,271     | 11,674             |                  |
| 1980 .....                 | 37,785                                    | 33,115                  | 1,439                  | 1,373  | 1,510                         | 2,050                     | 649  | 4,801                  | 9,854      | 11,439             |                  |
| 1981 .....                 | 38,768                                    | 33,341                  | 1,416                  | 1,269  | 1,701                         | 3,076                     | 699  | 4,622                  | 9,953      | 10,605             |                  |
| 1982 .....                 | 39,031                                    | 33,273                  | 1,516                  | 1,317  | 2,237                         | 4,170                     | 690  | 4,183                  | 9,306      | 9,854              |                  |
| 1983 .....                 | 40,157                                    | 34,369                  | 1,536                  | 1,177  | 2,318                         | 5,121                     | 722  | 4,297                  | 9,963      | 9,235              |                  |
| 1984 <sup>2</sup> .....    | 41,276                                    | 35,551                  | 1,524                  | 1,253  | 2,268                         | 4,873                     | 676  | 4,089                  | 10,228     | 10,640             |                  |
| 1985 <sup>2</sup> .....    | 40,976                                    | 35,197                  | 1,538                  | 1,272  | 2,165                         | 5,588                     | 687  | 3,909                  | 9,961      | 10,077             |                  |
| 1986 <sup>2</sup> .....    | 41,563                                    | 35,136                  | 1,646                  | 1,130  | 2,117                         | 5,900                     | 643  | 3,715                  | 9,960      | 10,025             |                  |
| 1987 <sup>2</sup> .....    | 41,739                                    | 34,841                  | 1,585                  | 1,114  | 2,126                         | 5,812                     | 648  | 3,575                  | 10,299     | 9,682              |                  |
| 1988 .....                 | 39,685                                    | 33,451                  | 1,537                  | 1,083  | 1,967                         | 5,556                     | 682  | 3,398                  | 10,324     | 8,904              |                  |
| 1989 .....                 | 42,157                                    | 35,477                  | 1,642                  | 1,049  | 2,141                         | 5,722                     | 666  | 3,609                  | 11,168     | 9,480              |                  |
| 1990 .....                 | 46,013                                    | 38,187                  | 1,611                  | 1,132  | 2,258                         | 6,272                     | 709  | 3,612                  | 12,348     | 10,245             |                  |
| 1991 .....                 | 48,637                                    | 40,322                  | 1,769                  | 1,322  | 2,097                         | 6,387                     | 710  | 3,675                  | 13,577     | 10,785             |                  |
| 1992 .....                 | 51,394                                    | 42,517                  | 1,712                  | 1,580  | 2,190                         | 6,602                     | 698  | 3,973                  | 14,341     | 11,421             |                  |
| 1993 .....                 | 52,719                                    | 44,283                  | 1,795                  | 1,761  | 2,305                         | 6,171                     | 746  | 4,409                  | 15,199     | 11,897             |                  |
| 1994 .....                 | 51,408                                    | 43,582                  | 1,740                  | 1,822  | 2,199                         | 5,460                     | 741  | 4,538                  | 15,038     | 12,044             |                  |
| 1995 .....                 | 51,416                                    | 43,839                  | 1,675                  | 1,768  | 2,155                         | 5,369                     | 791  | 4,871                  | 14,878     | 12,332             |                  |
| Engineering                |   |                         |                        |  |                               |                           |  |                        |            |                    |                  |
| Engi-<br>neering,<br>total | Aerospace<br>engineering                  | Chemical<br>engineering | Civil engi-<br>neering | Electrical<br>engineering                          | Industrial<br>engineering     | Mechanical<br>engineering | Metallur-<br>gical &<br>materials<br>engineering | Other engi-<br>neering |            | Health<br>fields   |                  |
| 1975 .....                 | 2,593                                     | 34                      | 118                    | 532  | 364                           | 491                       | 328  | 39                     | 687        | 2,496              |                  |
| 1976 .....                 | 2,779                                     | 28                      | 135                    | 581  | 384                           | 449                       | 296  | 42                     | 864        | 3,099              |                  |
| 1977 .....                 | 3,534                                     | 22                      | 130                    | 765  | 716                           | 524                       | 407  | 68                     | 902        | 3,680              |                  |
| 1978 <sup>1</sup> .....    | 3,936                                     | 13                      | 157                    | 793  | 748                           | 527                       | 516  | 83                     | 1,099      | 4,180              |                  |
| 1979 .....                 | 4,364                                     | 5                       | 185                    | 830  | 773                           | 552                       | 622  | 100                    | 1,297      | 4,672              |                  |
| 1980 .....                 | 4,670                                     | 7                       | 247                    | 901  | 949                           | 717                       | 654  | 71                     | 1,124      | 5,170              |                  |
| 1981 .....                 | 5,427                                     | 7                       | 273                    | 1,131  | 1,054                         | 778                       | 631  | 61                     | 1,492      | 5,393              |                  |
| 1982 .....                 | 5,758                                     | 8                       | 295                    | 930  | 1,218                         | 798                       | 632  | 68                     | 1,809      | 6,198              |                  |
| 1983 .....                 | 5,788                                     | 32                      | 252                    | 856  | 1,337                         | 701                       | 707  | 74                     | 1,829      | 6,442              |                  |
| 1984 <sup>2</sup> .....    | 5,725                                     | 32                      | 211                    | 766  | 1,381                         | 627                       | 805  | 64                     | 1,839      | 7,017              |                  |
| 1985 <sup>2</sup> .....    | 5,779                                     | 32                      | 163                    | 734  | 1,455                         | 688                       | 816  | 84                     | 1,807      | 7,294              |                  |
| 1986 <sup>2</sup> .....    | 6,427                                     | 33                      | 178                    | 859  | 1,807                         | 738                       | 1,026  | 101                    | 1,685      | 7,326              |                  |
| 1987 <sup>2</sup> .....    | 6,898                                     | 35                      | 177                    | 1,132  | 1,981                         | 807                       | 1,073  | 94                     | 1,599      | 7,657              |                  |
| 1988 .....                 | 6,234                                     | 37                      | 134                    | 975  | 1,935                         | 737                       | 1,043  | 80                     | 1,293      | 7,374              |                  |
| 1989 .....                 | 6,680                                     | 67                      | 104                    | 893  | 2,592                         | 932                       | 1,090  | 84                     | 918        | 7,680              |                  |
| 1990 .....                 | 7,826                                     | 91                      | 136                    | 1,027  | 3,077                         | 1,157                     | 1,210  | 105                    | 1,023      | 8,029              |                  |
| 1991 .....                 | 8,315                                     | 67                      | 152                    | 1,283  | 3,179                         | 1,213                     | 1,115  | 125                    | 1,181      | 9,107              |                  |
| 1992 .....                 | 8,877                                     | 37                      | 171                    | 1,605  | 3,436                         | 1,206                     | 1,178  | 159                    | 1,085      | 10,001             |                  |
| 1993 .....                 | 8,436                                     | 35                      | 158                    | 1,638  | 3,136                         | 1,171                     | 1,073  | 147                    | 1,078      | 11,648             |                  |
| 1994 .....                 | 7,826                                     | 62                      | 139                    | 1,581  | 2,874                         | 1,130                     | 919  | 120                    | 1,001      | 12,687             |                  |
| 1995 .....                 | 7,577                                     | 56                      | 141                    | 1,474  | 2,832                         | 1,218                     | 775  | 99                     | 982        | 13,766             |                  |

<sup>1</sup> Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

<sup>2</sup> These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 31. Graduate students in science, engineering, and health fields in doctorate-granting institutions,  
by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 377,612 | 384,800 | 398,208 | 413,570 | 432,431 | 440,471 | 441,164 | 436,328 |
| Total, science and engineering fields ..... | 335,602 | 340,612 | 351,146 | 364,071 | 379,403 | 383,514 | 380,350 | 372,506 |
| Sciences, total .....                       | 239,007 | 243,249 | 251,347 | 258,810 | 270,245 | 275,069 | 275,116 | 272,554 |
| Physical sciences .....                     | 31,425  | 31,974  | 32,464  | 32,941  | 33,636  | 33,523  | 32,709  | 31,795  |
| Astronomy .....                             | 731     | 789     | 810     | 829     | 869     | 880     | 973     | 912     |
| Chemistry .....                             | 17,574  | 17,792  | 18,114  | 18,363  | 18,896  | 19,050  | 18,742  | 18,569  |
| Physics .....                               | 12,893  | 13,193  | 13,331  | 13,555  | 13,657  | 13,385  | 12,711  | 12,048  |
| Physical sciences, n.e.c. ....              | 227     | 200     | 209     | 194     | 214     | 208     | 283     | 266     |
| Earth, atmospheric, & ocean sciences .....  | 12,784  | 12,594  | 12,852  | 13,158  | 13,767  | 14,044  | 14,220  | 14,034  |
| Atmospheric sciences .....                  | 929     | 900     | 925     | 956     | 1,076   | 1,095   | 1,090   | 1,062   |
| Geosciences .....                           | 7,950   | 7,610   | 7,234   | 7,105   | 7,269   | 7,325   | 7,260   | 7,108   |
| Oceanography .....                          | 1,926   | 2,090   | 2,216   | 2,274   | 2,402   | 2,473   | 2,678   | 2,549   |
| Earth, atmos., & ocean sci., n.e.c. ....    | 1,979   | 1,994   | 2,477   | 2,823   | 3,020   | 3,151   | 3,192   | 3,315   |
| Mathematical sciences .....                 | 17,110  | 17,106  | 17,516  | 17,855  | 18,165  | 17,695  | 17,380  | 16,354  |
| Mathematics & applied mathematics .....     | 14,564  | 14,626  | 14,885  | 15,157  | 15,279  | 14,718  | 14,342  | 13,326  |
| Statistics .....                            | 2,546   | 2,480   | 2,631   | 2,698   | 2,886   | 2,977   | 3,038   | 3,028   |
| Computer sciences .....                     | 26,671  | 26,760  | 27,985  | 28,223  | 29,718  | 30,127  | 28,818  | 28,140  |
| Agricultural sciences .....                 | 10,453  | 10,524  | 10,607  | 10,796  | 11,129  | 11,168  | 11,458  | 11,635  |
| Biological sciences .....                   | 44,167  | 45,243  | 46,377  | 48,103  | 50,204  | 52,043  | 53,605  | 53,882  |
| Anatomy .....                               | 1,056   | 1,078   | 1,000   | 1,051   | 1,030   | 1,027   | 1,079   | 1,056   |
| Biochemistry .....                          | 4,887   | 5,041   | 5,003   | 5,160   | 5,332   | 5,451   | 5,565   | 5,491   |
| Biology .....                               | 9,759   | 10,014  | 10,227  | 10,508  | 10,954  | 11,176  | 11,054  | 10,788  |
| Biometry/epidemiology .....                 | 1,682   | 1,722   | 1,871   | 2,031   | 2,365   | 2,658   | 2,710   | 2,812   |
| Biophysics .....                            | 592     | 655     | 642     | 697     | 751     | 780     | 794     | 855     |
| Botany .....                                | 2,887   | 2,810   | 2,712   | 2,673   | 2,665   | 2,705   | 2,741   | 2,605   |
| Cell biology .....                          | 2,078   | 2,234   | 2,555   | 2,809   | 3,093   | 3,362   | 3,753   | 3,843   |
| Ecology .....                               | 934     | 1,012   | 1,042   | 1,079   | 1,155   | 1,251   | 1,420   | 1,545   |
| Entomology/parasitology .....               | 1,240   | 1,181   | 1,173   | 1,171   | 1,193   | 1,247   | 1,263   | 1,241   |
| Genetics .....                              | 1,247   | 1,321   | 1,364   | 1,478   | 1,599   | 1,733   | 1,649   | 1,651   |
| Microbio., immunology, & virology .....     | 4,725   | 4,786   | 4,830   | 4,890   | 4,932   | 5,037   | 5,114   | 5,068   |
| Nutrition .....                             | 3,839   | 3,829   | 3,897   | 3,875   | 3,810   | 3,938   | 4,152   | 4,346   |
| Pathology .....                             | 1,276   | 1,303   | 1,287   | 1,378   | 1,379   | 1,485   | 1,603   | 1,575   |
| Pharmacology .....                          | 2,123   | 2,265   | 2,353   | 2,432   | 2,529   | 2,643   | 2,830   | 2,703   |
| Physiology .....                            | 2,220   | 2,206   | 2,236   | 2,332   | 2,317   | 2,372   | 2,378   | 2,540   |
| Zoology .....                               | 2,017   | 2,069   | 2,091   | 2,168   | 2,117   | 2,115   | 2,085   | 2,068   |
| Biosciences, n.e.c. ....                    | 1,605   | 1,717   | 2,094   | 2,371   | 2,983   | 3,063   | 3,415   | 3,695   |
| Psychology .....                            | 33,639  | 34,360  | 35,820  | 37,766  | 39,258  | 39,481  | 39,688  | 39,365  |
| Psychology, general .....                   | 11,333  | 12,290  | 12,965  | 14,809  | 15,415  | 15,867  | 16,319  | 16,338  |
| Clinical psychology .....                   | 15,337  | 13,836  | 14,161  | 13,445  | 13,370  | 12,840  | 12,595  | 12,100  |
| Psychology, n.e.c. ....                     | 6,969   | 8,234   | 8,694   | 9,512   | 10,473  | 10,774  | 10,774  | 10,927  |
| Social sciences .....                       | 62,758  | 64,688  | 67,726  | 69,968  | 74,368  | 76,988  | 77,238  | 77,349  |
| Agricultural economics .....                | 2,209   | 2,227   | 2,232   | 2,311   | 2,454   | 2,334   | 2,222   | 2,275   |
| Anthropology (cultural & social) .....      | 5,682   | 5,880   | 6,210   | 6,437   | 6,815   | 7,064   | 7,414   | 7,420   |
| Economics (except agricultural) .....       | 11,241  | 11,337  | 11,564  | 11,885  | 12,346  | 12,365  | 12,217  | 12,002  |
| Geography .....                             | 2,624   | 2,831   | 2,924   | 3,140   | 3,450   | 3,672   | 3,785   | 3,777   |
| History and philosophy of science .....     | 288     | 304     | 331     | 337     | 360     | 369     | 387     | 401     |
| Linguistics .....                           | 2,916   | 2,976   | 3,114   | 3,135   | 2,930   | 2,947   | 2,937   | 2,857   |
| Political science .....                     | 23,061  | 24,079  | 25,121  | 26,101  | 28,013  | 29,214  | 28,437  | 28,217  |
| Sociology .....                             | 6,466   | 6,709   | 6,993   | 7,396   | 7,912   | 8,263   | 8,255   | 8,301   |
| Sociology/anthropology .....                | 881     | 912     | 1,077   | 824     | 902     | 841     | 877     | 840     |
| Social sciences, n.e.c. ....                | 7,390   | 7,433   | 8,160   | 8,402   | 9,186   | 9,919   | 10,707  | 11,259  |
| Engineering, total .....                    | 96,595  | 97,363  | 99,799  | 105,261 | 109,158 | 108,445 | 105,234 | 99,952  |
| Aerospace engineering .....                 | 3,186   | 3,457   | 3,843   | 4,053   | 3,999   | 3,905   | 3,653   | 3,287   |
| Agricultural engineering .....              | 1,052   | 1,043   | 946     | 983     | 1,008   | 1,018   | 1,061   | 1,054   |
| Biomedical engineering .....                | 1,673   | 1,850   | 2,073   | 2,191   | 2,485   | 2,613   | 2,674   | 2,617   |
| Chemical engineering .....                  | 6,484   | 6,356   | 6,599   | 6,975   | 7,226   | 7,358   | 7,469   | 7,291   |
| Civil engineering .....                     | 13,836  | 14,016  | 14,515  | 16,115  | 17,967  | 17,945  | 18,344  | 17,744  |
| Electrical engineering .....                | 30,100  | 30,665  | 30,645  | 32,003  | 33,024  | 32,201  | 30,178  | 28,228  |
| Engineering science .....                   | 2,167   | 2,058   | 2,002   | 2,124   | 2,185   | 2,148   | 2,069   | 1,945   |
| Industrial eng./manufacturing eng. ....     | 10,656  | 10,162  | 10,091  | 11,463  | 12,319  | 12,425  | 12,566  | 11,964  |
| Mechanical engineering .....                | 15,108  | 15,175  | 15,669  | 16,615  | 17,459  | 17,404  | 16,842  | 15,585  |
| Metallurgical/materials eng. ....           | 4,257   | 4,510   | 4,836   | 5,035   | 5,353   | 5,216   | 5,071   | 4,821   |
| Mining engineering .....                    | 450     | 388     | 409     | 475     | 426     | 411     | 399     | 362     |
| Nuclear engineering .....                   | 1,303   | 1,323   | 1,278   | 1,282   | 1,286   | 1,306   | 1,246   | 1,154   |
| Petroleum engineering .....                 | 711     | 651     | 656     | 694     | 721     | 711     | 605     | 568     |
| Engineering, n.e.c. ....                    | 5,612   | 5,709   | 6,237   | 5,253   | 3,700   | 3,784   | 3,057   | 3,332   |

See explanatory information, if any, and SOURCE at end of table.

**Table 31. Graduate students in science, engineering, and health fields in doctorate-granting institutions,  
by field: 1988-95**

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| Field                                      | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|
| Total, health fields .....                 | 42,010 | 44,188 | 47,062 | 49,499 | 53,028 | 56,957 | 60,814 | 63,822 |
| Medical fields .....                       | 9,644  | 9,780  | 10,478 | 11,097 | 11,861 | 13,224 | 14,046 | 14,677 |
| Anesthesiology .....                       | 197    | 276    | 329    | 443    | 511    | 494    | 516    | 529    |
| Cardiology .....                           | 0      | 0      | 0      | 2      | 8      | 11     | 14     | 19     |
| Oncology/cancer research .....             | 89     | 104    | 113    | 156    | 197    | 209    | 208    | 189    |
| Endocrinology .....                        | 70     | 82     | 74     | 66     | 71     | 63     | 63     | 53     |
| Gastroenterology .....                     | 0      | 0      | 1      | 0      | 0      | 1      | 0      | 0      |
| Hematology .....                           | 6      | 4      | 4      | 4      | 5      | 3      | 2      | 1      |
| Neurology .....                            | 612    | 744    | 844    | 1,003  | 1,149  | 1,311  | 1,455  | 1,554  |
| Obstetrics and gynecology .....            | 9      | 7      | 5      | 10     | 3      | 3      | 4      | 6      |
| Ophthalmology .....                        | 51     | 43     | 37     | 32     | 27     | 19     | 32     | 30     |
| Otorhinolaryngology .....                  | 6      | 9      | 4      | 3      | 0      | 1      | 2      | 0      |
| Pediatrics .....                           | 227    | 136    | 140    | 153    | 154    | 196    | 261    | 236    |
| Preventive medicine/community health ..... | 7,390  | 7,408  | 7,911  | 8,062  | 8,416  | 9,470  | 9,942  | 10,408 |
| Psychiatry .....                           | 106    | 67     | 71     | 46     | 96     | 103    | 144    | 165    |
| Pulmonary disease .....                    | 3      | 2      | 0      | 0      | 0      | 0      | 0      | 0      |
| Radiology .....                            | 208    | 192    | 196    | 233    | 252    | 287    | 320    | 268    |
| Surgery .....                              | 64     | 72     | 65     | 69     | 76     | 82     | 119    | 180    |
| Clinical medicine, n.e.c. .....            | 606    | 634    | 684    | 815    | 896    | 971    | 964    | 1,039  |
| Other health fields .....                  | 32,366 | 34,408 | 36,584 | 38,402 | 41,167 | 43,733 | 46,768 | 49,145 |
| Dental sciences .....                      | 1,048  | 1,004  | 956    | 1,016  | 1,121  | 1,135  | 1,199  | 1,251  |
| Nursing .....                              | 16,343 | 17,074 | 18,468 | 18,781 | 19,755 | 20,608 | 22,441 | 23,271 |
| Pharmaceutical sciences .....              | 2,609  | 2,779  | 2,887  | 2,967  | 2,788  | 2,851  | 2,890  | 2,926  |
| Speech pathology/audiology .....           | 5,754  | 5,989  | 6,251  | 6,576  | 7,361  | 7,839  | 8,253  | 8,511  |
| Veterinary sciences .....                  | 735    | 782    | 881    | 875    | 923    | 853    | 858    | 915    |
| Health related, n.e.c. .....               | 5,877  | 6,780  | 7,141  | 8,187  | 9,219  | 10,447 | 11,127 | 12,271 |

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 32. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 259,031 | 266,027 | 274,596 | 287,023 | 300,980 | 306,942 | 308,743 | 305,652 |
| Total, science and engineering fields ..... | 236,871 | 242,698 | 249,831 | 260,519 | 272,488 | 275,726 | 274,897 | 269,317 |
| Sciences, total .....                       | 175,746 | 180,201 | 185,885 | 191,528 | 200,474 | 204,185 | 205,517 | 203,539 |
| Physical sciences .....                     | 27,867  | 28,461  | 28,815  | 29,405  | 30,033  | 29,905  | 29,319  | 28,209  |
| Astronomy .....                             | 705     | 762     | 790     | 810     | 840     | 848     | 953     | 871     |
| Chemistry .....                             | 15,614  | 15,816  | 15,979  | 16,318  | 16,636  | 16,786  | 16,690  | 16,328  |
| Physics .....                               | 11,426  | 11,784  | 11,945  | 12,169  | 12,429  | 12,153  | 11,512  | 10,836  |
| Physical sciences, n.e.c. ....              | 122     | 99      | 101     | 108     | 128     | 118     | 164     | 174     |
| Earth, atmospheric, & ocean sciences .....  | 9,746   | 9,625   | 9,836   | 9,900   | 10,452  | 10,766  | 10,853  | 10,711  |
| Atmospheric sciences .....                  | 825     | 803     | 828     | 857     | 958     | 978     | 981     | 956     |
| Geosciences .....                           | 6,069   | 5,796   | 5,600   | 5,522   | 5,693   | 5,789   | 5,764   | 5,606   |
| Oceanography .....                          | 1,576   | 1,752   | 1,887   | 1,931   | 2,061   | 2,130   | 2,263   | 2,183   |
| Earth, atmos., & ocean sci., n.e.c. ....    | 1,276   | 1,274   | 1,521   | 1,590   | 1,740   | 1,869   | 1,845   | 1,966   |
| Mathematical sciences .....                 | 12,831  | 13,048  | 13,234  | 13,594  | 13,974  | 13,790  | 13,454  | 12,711  |
| Computer sciences .....                     | 13,648  | 14,119  | 14,784  | 14,752  | 15,677  | 15,761  | 15,334  | 15,186  |
| Agricultural sciences .....                 | 8,731   | 8,690   | 8,713   | 8,850   | 9,086   | 9,049   | 9,124   | 9,196   |
| Biological sciences .....                   | 37,798  | 38,889  | 39,514  | 41,217  | 42,772  | 44,597  | 46,148  | 46,310  |
| Anatomy .....                               | 973     | 999     | 911     | 961     | 960     | 977     | 983     | 978     |
| Biochemistry .....                          | 4,720   | 4,793   | 4,808   | 4,940   | 5,030   | 5,137   | 5,200   | 5,164   |
| Biology .....                               | 7,559   | 7,971   | 7,961   | 8,230   | 8,387   | 8,576   | 8,636   | 8,415   |
| Biometry/epidemiology .....                 | 1,213   | 1,211   | 1,231   | 1,431   | 1,634   | 1,990   | 2,056   | 2,093   |
| Biophysics .....                            | 544     | 610     | 605     | 679     | 728     | 755     | 770     | 810     |
| Botany .....                                | 2,520   | 2,431   | 2,341   | 2,286   | 2,279   | 2,351   | 2,345   | 2,147   |
| Cell biology .....                          | 2,023   | 2,177   | 2,485   | 2,716   | 2,961   | 3,186   | 3,592   | 3,661   |
| Ecology .....                               | 816     | 866     | 878     | 908     | 976     | 1,040   | 1,187   | 1,276   |
| Entomology/parasitology .....               | 1,061   | 1,009   | 997     | 1,014   | 1,016   | 1,039   | 1,066   | 1,041   |
| Genetics .....                              | 1,146   | 1,211   | 1,255   | 1,371   | 1,488   | 1,640   | 1,553   | 1,572   |
| Microbio., immunology, & virology .....     | 4,301   | 4,321   | 4,361   | 4,401   | 4,445   | 4,600   | 4,698   | 4,689   |
| Nutrition .....                             | 2,716   | 2,687   | 2,770   | 2,820   | 2,771   | 2,907   | 3,069   | 3,268   |
| Pathology .....                             | 1,058   | 1,089   | 1,055   | 1,085   | 1,138   | 1,264   | 1,359   | 1,350   |
| Pharmacology .....                          | 1,986   | 2,135   | 2,222   | 2,304   | 2,397   | 2,499   | 2,672   | 2,534   |
| Physiology .....                            | 2,008   | 2,057   | 2,076   | 2,163   | 2,160   | 2,220   | 2,221   | 2,376   |
| Zoology .....                               | 1,703   | 1,760   | 1,671   | 1,760   | 1,768   | 1,743   | 1,712   | 1,746   |
| Biosciences, n.e.c. ....                    | 1,451   | 1,562   | 1,887   | 2,148   | 2,634   | 2,673   | 3,029   | 3,190   |
| Psychology .....                            | 23,878  | 24,775  | 25,457  | 26,467  | 27,778  | 28,258  | 28,590  | 28,722  |
| Social sciences .....                       | 41,247  | 42,594  | 45,532  | 47,343  | 50,702  | 52,059  | 52,695  | 52,494  |
| Agricultural economics .....                | 1,878   | 1,885   | 1,934   | 1,976   | 2,069   | 1,910   | 1,892   | 1,935   |
| Anthropology (cultural & social) .....      | 4,197   | 4,320   | 4,719   | 4,977   | 5,219   | 5,319   | 5,718   | 5,662   |
| Economics (except agricultural) .....       | 8,745   | 8,807   | 9,011   | 9,519   | 9,795   | 9,757   | 9,700   | 9,421   |
| Geography .....                             | 1,968   | 2,106   | 2,151   | 2,298   | 2,547   | 2,734   | 2,800   | 2,728   |
| Linguistics .....                           | 2,457   | 2,406   | 2,552   | 2,510   | 2,401   | 2,447   | 2,420   | 2,382   |
| Political science .....                     | 12,045  | 12,756  | 13,885  | 14,506  | 16,058  | 16,822  | 16,369  | 16,021  |
| Sociology .....                             | 4,853   | 5,021   | 5,408   | 5,585   | 6,051   | 6,156   | 6,275   | 6,262   |
| Sociology/anthropology .....                | 513     | 580     | 706     | 583     | 612     | 613     | 644     | 617     |
| Social sciences, other .....                | 4,591   | 4,713   | 5,166   | 5,389   | 5,950   | 6,301   | 6,877   | 7,466   |
| Engineering, total .....                    | 61,125  | 62,497  | 63,946  | 68,991  | 72,014  | 71,541  | 69,380  | 65,778  |
| Aerospace engineering .....                 | 2,517   | 2,742   | 2,946   | 3,258   | 3,269   | 3,227   | 2,967   | 2,668   |
| Agricultural engineering .....              | 888     | 861     | 799     | 823     | 840     | 835     | 879     | 872     |
| Biomedical engineering .....                | 1,397   | 1,571   | 1,761   | 1,900   | 2,138   | 2,234   | 2,246   | 2,252   |
| Chemical engineering .....                  | 5,291   | 5,248   | 5,405   | 5,733   | 5,873   | 5,970   | 6,027   | 5,894   |
| Civil engineering .....                     | 9,617   | 9,671   | 9,872   | 10,988  | 11,985  | 11,952  | 12,155  | 11,762  |
| Electrical engineering .....                | 17,048  | 17,727  | 17,918  | 19,172  | 20,169  | 19,653  | 18,691  | 17,639  |
| Engineering science .....                   | 1,405   | 1,249   | 1,241   | 1,357   | 1,408   | 1,395   | 1,343   | 1,241   |
| Industrial eng./manufacturing eng. ....     | 4,150   | 4,464   | 4,480   | 5,395   | 5,823   | 5,665   | 5,666   | 5,062   |
| Mechanical engineering .....                | 10,163  | 10,243  | 10,567  | 11,396  | 12,020  | 12,102  | 11,624  | 10,906  |
| Metallurgical/materials eng. ....           | 3,448   | 3,696   | 3,910   | 4,038   | 4,255   | 4,226   | 4,084   | 3,864   |
| Nuclear engineering .....                   | 1,105   | 1,112   | 1,080   | 1,080   | 1,084   | 1,070   | 997     | 883     |
| Engineering, other .....                    | 4,096   | 3,913   | 3,967   | 3,851   | 3,150   | 3,212   | 2,701   | 2,735   |
| Total, health fields .....                  | 22,160  | 23,329  | 24,765  | 26,504  | 28,492  | 31,216  | 33,846  | 36,335  |
| Clinical fields .....                       | 1,249   | 1,364   | 1,448   | 1,682   | 1,873   | 2,048   | 2,190   | 2,267   |
| Dental sciences .....                       | 894     | 856     | 827     | 875     | 988     | 1,005   | 1,048   | 1,096   |
| Nursing .....                               | 5,401   | 5,381   | 5,553   | 5,661   | 5,616   | 5,964   | 6,758   | 7,245   |
| Pharmaceutical sciences .....               | 1,906   | 2,045   | 2,148   | 2,198   | 2,074   | 2,130   | 2,188   | 2,152   |
| Preventive medicine/community health .....  | 4,179   | 4,176   | 4,445   | 4,357   | 4,735   | 5,225   | 5,326   | 5,816   |
| Speech pathology/audiology .....            | 4,289   | 4,515   | 4,568   | 4,995   | 5,563   | 6,126   | 6,472   | 6,533   |
| Veterinary sciences .....                   | 589     | 649     | 698     | 706     | 743     | 673     | 679     | 719     |
| Other health fields .....                   | 3,653   | 4,343   | 5,078   | 6,030   | 6,900   | 8,045   | 9,185   | 10,507  |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 33. Part-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field: 1988-95**

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| Field                                       | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all surveyed fields .....            | 118,581 | 118,773 | 123,612 | 126,547 | 131,451 | 133,529 | 132,421 | 130,676 |
| Total, science and engineering fields ..... | 98,731  | 97,914  | 101,315 | 103,552 | 106,915 | 107,788 | 105,453 | 103,189 |
| Sciences, total .....                       | 63,261  | 63,048  | 65,462  | 67,282  | 69,771  | 70,884  | 69,599  | 69,015  |
| Physical sciences .....                     | 3,558   | 3,513   | 3,649   | 3,536   | 3,603   | 3,618   | 3,390   | 3,586   |
| Astronomy .....                             | 26      | 27      | 20      | 19      | 29      | 32      | 20      | 41      |
| Chemistry .....                             | 1,960   | 1,976   | 2,135   | 2,045   | 2,260   | 2,264   | 2,052   | 2,241   |
| Physics .....                               | 1,467   | 1,409   | 1,386   | 1,386   | 1,228   | 1,232   | 1,199   | 1,212   |
| Physical sciences, n.e.c. ....              | 105     | 101     | 108     | 86      | 86      | 90      | 119     | 92      |
| Earth, atmospheric, & ocean sciences .....  | 3,038   | 2,969   | 3,016   | 3,258   | 3,315   | 3,278   | 3,367   | 3,323   |
| Atmospheric sciences .....                  | 104     | 97      | 97      | 99      | 118     | 117     | 109     | 106     |
| Geosciences .....                           | 1,881   | 1,814   | 1,634   | 1,583   | 1,576   | 1,536   | 1,496   | 1,502   |
| Oceanography .....                          | 350     | 338     | 329     | 343     | 341     | 343     | 415     | 366     |
| Earth, atmos., & ocean sci., n.e.c. ....    | 703     | 720     | 956     | 1,233   | 1,280   | 1,282   | 1,347   | 1,349   |
| Mathematical sciences .....                 | 4,279   | 4,058   | 4,282   | 4,261   | 4,191   | 3,905   | 3,926   | 3,643   |
| Computer sciences .....                     | 13,023  | 12,641  | 13,201  | 13,471  | 14,041  | 14,366  | 13,484  | 12,954  |
| Agricultural sciences .....                 | 1,722   | 1,834   | 1,894   | 1,946   | 2,043   | 2,119   | 2,334   | 2,439   |
| Biological sciences .....                   | 6,369   | 6,354   | 6,863   | 6,886   | 7,432   | 7,446   | 7,457   | 7,572   |
| Anatomy .....                               | 83      | 79      | 89      | 90      | 70      | 50      | 96      | 78      |
| Biochemistry .....                          | 167     | 248     | 195     | 220     | 302     | 314     | 365     | 327     |
| Biology .....                               | 2,200   | 2,043   | 2,266   | 2,278   | 2,567   | 2,600   | 2,418   | 2,373   |
| Biometry/epidemiology .....                 | 469     | 511     | 640     | 600     | 731     | 668     | 654     | 719     |
| Biophysics .....                            | 48      | 45      | 37      | 18      | 23      | 25      | 24      | 45      |
| Botany .....                                | 367     | 379     | 371     | 387     | 386     | 354     | 396     | 458     |
| Cell biology .....                          | 55      | 57      | 70      | 93      | 132     | 176     | 161     | 182     |
| Ecology .....                               | 118     | 146     | 164     | 171     | 179     | 211     | 233     | 269     |
| Entomology/parasitology .....               | 179     | 172     | 176     | 157     | 177     | 208     | 197     | 200     |
| Genetics .....                              | 101     | 110     | 109     | 107     | 111     | 93      | 96      | 79      |
| Microbio., immunology, & virology .....     | 424     | 465     | 469     | 489     | 487     | 437     | 416     | 379     |
| Nutrition .....                             | 1,123   | 1,142   | 1,127   | 1,055   | 1,039   | 1,031   | 1,083   | 1,078   |
| Pathology .....                             | 218     | 214     | 232     | 293     | 241     | 221     | 244     | 225     |
| Pharmacology .....                          | 137     | 130     | 131     | 128     | 132     | 144     | 158     | 169     |
| Physiology .....                            | 212     | 149     | 160     | 169     | 157     | 152     | 157     | 164     |
| Zoology .....                               | 314     | 309     | 420     | 408     | 349     | 372     | 373     | 322     |
| Biosciences, n.e.c. ....                    | 154     | 155     | 207     | 223     | 349     | 390     | 386     | 505     |
| Psychology .....                            | 9,761   | 9,585   | 10,363  | 11,299  | 11,480  | 11,223  | 11,098  | 10,643  |
| Social sciences .....                       | 21,511  | 22,094  | 22,194  | 22,625  | 23,666  | 24,929  | 24,543  | 24,855  |
| Agricultural economics .....                | 331     | 342     | 298     | 335     | 385     | 424     | 330     | 340     |
| Anthropology (cultural & social) .....      | 1,485   | 1,560   | 1,491   | 1,460   | 1,596   | 1,745   | 1,696   | 1,758   |
| Economics (except agricultural) .....       | 2,496   | 2,530   | 2,553   | 2,366   | 2,551   | 2,608   | 2,517   | 2,581   |
| Geography .....                             | 656     | 725     | 773     | 842     | 903     | 938     | 985     | 1,049   |
| Linguistics .....                           | 459     | 570     | 562     | 625     | 529     | 500     | 517     | 475     |
| Political science .....                     | 11,016  | 11,323  | 11,236  | 11,595  | 11,955  | 12,392  | 12,068  | 12,196  |
| Sociology .....                             | 1,613   | 1,688   | 1,585   | 1,811   | 1,861   | 2,107   | 1,980   | 2,039   |
| Sociology/anthropology .....                | 368     | 332     | 371     | 241     | 290     | 228     | 233     | 223     |
| Social sciences, other .....                | 3,087   | 3,024   | 3,325   | 3,350   | 3,596   | 3,987   | 4,217   | 4,194   |
| Engineering, total .....                    | 35,470  | 34,866  | 35,853  | 36,270  | 37,144  | 36,904  | 35,854  | 34,174  |
| Aerospace engineering .....                 | 669     | 715     | 897     | 795     | 730     | 678     | 686     | 619     |
| Agricultural engineering .....              | 164     | 182     | 147     | 160     | 168     | 183     | 182     | 182     |
| Biomedical engineering .....                | 276     | 279     | 312     | 291     | 347     | 379     | 428     | 365     |
| Chemical engineering .....                  | 1,193   | 1,108   | 1,194   | 1,242   | 1,353   | 1,388   | 1,442   | 1,397   |
| Civil engineering .....                     | 4,219   | 4,345   | 4,643   | 5,127   | 5,982   | 5,993   | 6,189   | 5,982   |
| Electrical engineering .....                | 13,052  | 12,938  | 12,727  | 12,831  | 12,855  | 12,548  | 11,487  | 10,589  |
| Engineering science .....                   | 762     | 809     | 761     | 767     | 777     | 753     | 726     | 704     |
| Industrial eng./manufacturing eng. ....     | 6,506   | 5,698   | 5,611   | 6,068   | 6,496   | 6,760   | 6,900   | 6,902   |
| Mechanical engineering .....                | 4,945   | 4,932   | 5,102   | 5,219   | 5,439   | 5,302   | 5,218   | 4,679   |
| Metallurgical/materials eng. ....           | 809     | 814     | 926     | 997     | 1,098   | 990     | 987     | 957     |
| Nuclear engineering .....                   | 198     | 211     | 198     | 202     | 202     | 236     | 249     | 271     |
| Engineering, other .....                    | 2,677   | 2,835   | 3,335   | 2,571   | 1,697   | 1,694   | 1,360   | 1,527   |
| Total, health fields .....                  | 19,850  | 20,859  | 22,297  | 22,995  | 24,536  | 25,741  | 26,968  | 27,487  |
| Clinical fields .....                       | 393     | 264     | 275     | 350     | 423     | 395     | 459     | 448     |
| Dental sciences .....                       | 154     | 148     | 129     | 141     | 133     | 130     | 151     | 155     |
| Nursing .....                               | 10,942  | 11,693  | 12,915  | 13,120  | 14,139  | 14,644  | 15,683  | 16,026  |
| Pharmaceutical sciences .....               | 703     | 734     | 739     | 769     | 714     | 721     | 702     | 774     |
| Preventive medicine/community health .....  | 3,211   | 3,232   | 3,466   | 3,705   | 3,681   | 4,245   | 4,616   | 4,592   |
| Speech pathology/audiology .....            | 1,465   | 1,474   | 1,683   | 1,581   | 1,798   | 1,713   | 1,781   | 1,978   |
| Veterinary sciences .....                   | 146     | 133     | 183     | 169     | 180     | 180     | 179     | 196     |
| Other health fields .....                   | 2,836   | 3,181   | 2,907   | 3,160   | 3,468   | 3,713   | 3,397   | 3,318   |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

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| Institutional ranking                             | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| Total, all institutions .....                     | 335,602 | 340,612 | 351,146 | 364,071 | 379,403 | 383,514 | 380,350 | 372,506 |
| 1 University of Wisconsin - Madison .....         | 4,735   | 4,902   | 5,073   | 5,257   | 5,412   | 5,466   | 5,294   | 5,044   |
| 2 University of Michigan .....                    | 4,474   | 4,575   | 4,765   | 4,783   | 5,080   | 5,111   | 5,084   | 4,907   |
| 3 University of Minnesota .....                   | 4,950   | 5,048   | 5,019   | 5,148   | 5,168   | 5,316   | 5,072   | 4,836   |
| 4 Univ of Illinois at Urbana-Champaign .....      | 4,681   | 4,722   | 4,814   | 4,825   | 4,929   | 4,998   | 4,885   | 4,802   |
| 5 Stanford University .....                       | 4,076   | 4,099   | 4,209   | 4,294   | 4,490   | 4,661   | 4,495   | 4,526   |
| 6 Texas A & M University .....                    | 4,371   | 4,597   | 4,871   | 4,962   | 5,250   | 5,117   | 4,788   | 4,526   |
| 7 University of Calif at Berkeley .....           | 4,624   | 4,578   | 4,715   | 4,516   | 4,559   | 4,481   | 4,430   | 4,460   |
| 8 Ohio State University, The .....                | 4,407   | 4,319   | 4,371   | 4,596   | 4,607   | 4,671   | 4,420   | 4,332   |
| 9 George Washington University .....              | 4,095   | 3,910   | 4,138   | 4,207   | 4,584   | 4,517   | 4,532   | 4,305   |
| 10 University of Southern California .....        | 6,735   | 5,987   | 5,266   | 5,171   | 5,399   | 5,260   | 4,546   | 4,272   |
| Total, 1st 10 institutions .....                  | 47,148  | 46,737  | 47,241  | 47,759  | 49,478  | 49,598  | 47,546  | 46,010  |
| 11 Pennsylvania State University .....            | 4,053   | 4,176   | 4,128   | 4,244   | 4,250   | 4,261   | 4,223   | 4,271   |
| 12 Massachusetts Institute of Technology .....    | 4,013   | 4,237   | 4,280   | 4,308   | 4,342   | 4,382   | 4,343   | 4,206   |
| 13 University of Texas at Austin .....            | 4,188   | 4,204   | 4,306   | 4,559   | 4,715   | 4,722   | 4,550   | 4,199   |
| 14 University of Colorado .....                   | 3,174   | 3,373   | 3,636   | 3,834   | 4,175   | 4,220   | 4,009   | 4,067   |
| 15 University of Maryland - College Park .....    | 3,638   | 3,794   | 3,856   | 3,812   | 3,899   | 3,972   | 4,008   | 4,024   |
| 16 Rutgers the State Univ of New Jersey .....     | 3,798   | 3,848   | 3,938   | 3,991   | 3,975   | 3,920   | 3,867   | 3,800   |
| 17 University of Washington .....                 | 3,613   | 3,573   | 3,737   | 3,876   | 3,783   | 3,748   | 3,764   | 3,757   |
| 18 Purdue University .....                        | 3,753   | 3,751   | 3,645   | 3,739   | 3,871   | 3,871   | 3,854   | 3,718   |
| 19 Cornell University .....                       | 3,314   | 3,326   | 3,323   | 3,376   | 3,700   | 3,707   | 3,683   | 3,640   |
| 20 University of California, Los Angeles .....    | 3,108   | 3,106   | 3,140   | 3,211   | 3,271   | 3,448   | 3,832   | 3,626   |
| Total, 1st 20 institutions .....                  | 83,800  | 84,125  | 85,230  | 86,709  | 89,459  | 89,849  | 87,679  | 85,318  |
| 21 Georgia Institute of Technology .....          | 2,677   | 2,766   | 2,972   | 3,326   | 3,548   | 3,649   | 3,688   | 3,540   |
| 22 Virginia Polytechnic Inst and State Univ ..... | 2,961   | 3,155   | 3,194   | 3,158   | 3,326   | 3,381   | 3,298   | 3,506   |
| 23 Indiana University .....                       | 1,973   | 2,405   | 3,034   | 3,255   | 3,458   | 3,597   | 3,530   | 3,485   |
| 24 University of Florida .....                    | 2,895   | 2,938   | 3,052   | 3,224   | 3,471   | 3,583   | 3,502   | 3,427   |
| 25 North Carolina State Univ at Raleigh .....     | 2,982   | 3,050   | 3,004   | 3,035   | 3,230   | 3,034   | 3,342   | 3,405   |
| 26 Harvard University .....                       | 2,787   | 2,725   | 2,839   | 3,032   | 3,253   | 3,244   | 3,231   | 3,185   |
| 27 Louisiana State University .....               | 2,303   | 2,229   | 2,467   | 2,738   | 2,916   | 3,036   | 3,127   | 3,184   |
| 28 George Mason University .....                  | 1,728   | 1,869   | 2,051   | 2,102   | 2,218   | 2,566   | 2,682   | 3,101   |
| 29 Arizona State University .....                 | 2,534   | 2,694   | 2,750   | 2,893   | 3,156   | 3,154   | 3,077   | 3,080   |
| 30 Michigan State University .....                | 2,688   | 2,874   | 2,828   | 2,906   | 3,093   | 3,171   | 3,064   | 3,005   |
| Total, 1st 30 institutions .....                  | 109,328 | 110,830 | 113,421 | 116,378 | 121,128 | 122,264 | 120,220 | 118,236 |
| 31 University of Arizona .....                    | 3,346   | 3,216   | 3,126   | 3,146   | 3,203   | 3,248   | 3,227   | 3,004   |
| 32 University of Pittsburgh .....                 | 2,401   | 2,471   | 2,696   | 2,749   | 3,081   | 3,067   | 3,119   | 2,946   |
| 33 University of Massachusetts .....              | 2,664   | 2,565   | 2,617   | 2,629   | 2,626   | 2,675   | 2,758   | 2,757   |
| 34 Wayne State University .....                   | 2,096   | 2,431   | 2,592   | 2,653   | 2,786   | 2,925   | 2,910   | 2,694   |
| 35 SUNY - Buffalo .....                           | 2,608   | 2,571   | 2,747   | 2,871   | 2,882   | 2,911   | 2,784   | 2,679   |
| 36 Iowa State University .....                    | 2,669   | 2,634   | 2,707   | 2,768   | 2,817   | 2,876   | 2,799   | 2,676   |
| 37 New York University .....                      | 2,523   | 2,547   | 2,567   | 2,702   | 2,847   | 2,833   | 2,668   | 2,606   |
| 38 University of Kansas .....                     | 1,636   | 1,736   | 1,781   | 1,919   | 2,015   | 2,027   | 2,551   | 2,459   |
| 39 Boston University .....                        | 1,730   | 1,748   | 2,086   | 2,162   | 2,220   | 2,376   | 2,496   | 2,442   |
| 40 University of Calif at Davis .....             | 2,578   | 2,655   | 2,699   | 2,563   | 2,584   | 2,554   | 2,495   | 2,425   |
| Total, 1st 40 institutions .....                  | 133,579 | 135,404 | 139,039 | 142,540 | 148,189 | 149,756 | 148,027 | 144,924 |
| 41 University of Pennsylvania .....               | 2,374   | 2,468   | 2,465   | 2,477   | 2,472   | 2,456   | 2,360   | 2,386   |
| 42 Columbia Univ in the City of New York .....    | 2,436   | 2,480   | 2,382   | 2,413   | 2,448   | 2,397   | 2,411   | 2,309   |
| 43 University of Tennessee at Knoxville .....     | 2,259   | 2,392   | 2,312   | 2,358   | 2,458   | 2,489   | 2,489   | 2,283   |
| 44 University of Cincinnati .....                 | 1,956   | 1,940   | 2,084   | 2,223   | 2,161   | 2,175   | 2,233   | 2,267   |
| 45 Univ of North Carolina at Chapel Hill .....    | 2,022   | 2,135   | 2,236   | 2,180   | 2,350   | 2,375   | 2,344   | 2,264   |
| 46 University of Chicago .....                    | 1,745   | 1,960   | 1,999   | 1,859   | 2,190   | 2,165   | 2,267   | 2,178   |
| 47 American University, The .....                 | 1,371   | 1,476   | 1,559   | 1,656   | 2,042   | 2,305   | 2,280   | 2,166   |
| 48 SUNY - Stony Brook .....                       | 1,865   | 1,837   | 1,843   | 1,955   | 2,128   | 2,131   | 2,142   | 2,108   |
| 49 University of Illinois at Chicago .....        | 2,098   | 2,268   | 2,296   | 2,341   | 2,404   | 2,307   | 2,160   | 2,088   |
| 50 University of Connecticut .....                | 1,835   | 1,832   | 1,980   | 2,024   | 2,186   | 2,218   | 2,102   | 2,081   |
| Total, 1st 50 institutions .....                  | 153,540 | 156,192 | 160,195 | 164,026 | 171,028 | 172,774 | 170,815 | 167,054 |
| 51 Colorado State University .....                | 1,687   | 1,668   | 1,649   | 1,793   | 1,882   | 1,973   | 1,956   | 1,927   |
| 52 Oregon State University .....                  | 1,705   | 1,663   | 1,715   | 1,759   | 1,761   | 1,904   | 1,887   | 1,911   |
| 53 University of Houston .....                    | 1,602   | 1,927   | 2,278   | 2,947   | 2,997   | 2,804   | 2,032   | 1,878   |
| 54 Auburn University .....                        | 1,320   | 1,436   | 1,595   | 1,732   | 1,772   | 1,887   | 1,854   | 1,849   |
| 55 University of Georgia .....                    | 1,467   | 1,447   | 1,501   | 1,598   | 1,702   | 1,781   | 1,855   | 1,837   |
| 56 University of Nebraska - Lincoln .....         | 1,399   | 1,433   | 1,532   | 1,721   | 1,879   | 1,979   | 1,982   | 1,833   |
| 57 University of New Mexico .....                 | 1,490   | 1,533   | 1,591   | 1,625   | 1,674   | 1,862   | 1,817   | 1,819   |
| 58 Northeastern University .....                  | 2,109   | 1,872   | 1,951   | 2,058   | 2,094   | 2,036   | 1,973   | 1,815   |
| 59 University of Calif at San Diego .....         | 1,435   | 1,528   | 1,680   | 1,804   | 1,795   | 1,798   | 1,781   | 1,814   |
| 60 University of Utah .....                       | 1,436   | 1,515   | 1,602   | 1,627   | 1,701   | 1,695   | 1,684   | 1,814   |
| Total, 1st 60 institutions .....                  | 169,190 | 172,214 | 177,289 | 182,690 | 190,285 | 192,493 | 189,636 | 185,551 |

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

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| Institutional ranking                          | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| 61 University of Virginia .....                | 1,630   | 1,615   | 1,830   | 1,874   | 1,915   | 1,923   | 1,878   | 1,810   |
| 62 Nova Southeastern University .....          | 1,136   | 1,069   | 1,034   | 1,140   | 1,237   | 1,503   | 1,778   | 1,808   |
| 63 University of Kentucky .....                | 1,411   | 1,514   | 1,572   | 1,626   | 1,754   | 1,731   | 1,800   | 1,791   |
| 64 Kansas State University .....               | 1,481   | 1,502   | 1,495   | 1,540   | 1,618   | 1,732   | 1,781   | 1,786   |
| 65 Oklahoma State University .....             | 1,528   | 1,685   | 1,704   | 1,794   | 1,823   | 1,773   | 1,747   | 1,785   |
| 66 University of Massachusetts Lowell .....    | 1,868   | 1,420   | 1,841   | 1,796   | 1,764   | 1,552   | 1,679   | 1,783   |
| 67 University of Hawaii at Manoa .....         | 1,514   | 1,525   | 1,626   | 1,719   | 1,667   | 1,747   | 1,843   | 1,772   |
| 68 University of Missouri - Columbia .....     | 1,698   | 1,689   | 1,742   | 1,811   | 1,821   | 1,842   | 1,789   | 1,754   |
| 69 University of South Florida .....           | 1,322   | 1,418   | 1,490   | 1,526   | 1,710   | 1,844   | 1,743   | 1,744   |
| 70 Teachers College, Columbia University ..... | 1,555   | 1,491   | 1,441   | 1,528   | 1,533   | 1,629   | 1,661   | 1,741   |
| Total, 1st 70 institutions .....               | 184,333 | 187,142 | 193,064 | 199,044 | 207,127 | 209,769 | 207,335 | 203,325 |
| 71 Carnegie-Mellon University .....            | 1,574   | 1,621   | 1,671   | 1,668   | 1,684   | 1,664   | 1,693   | 1,718   |
| 72 New Jersey Institute of Technology .....    | 2,658   | 2,647   | 2,283   | 1,848   | 1,820   | 1,742   | 1,664   | 1,711   |
| 73 Rensselaer Polytechnic Institute .....      | 1,668   | 1,795   | 1,852   | 2,036   | 2,040   | 2,024   | 1,933   | 1,694   |
| 74 University of Oklahoma .....                | 1,617   | 1,659   | 1,786   | 1,846   | 2,015   | 1,953   | 1,774   | 1,690   |
| 75 University of Iowa .....                    | 1,652   | 1,634   | 1,721   | 1,795   | 1,726   | 1,746   | 1,714   | 1,687   |
| 76 Clemson University .....                    | 1,354   | 1,402   | 1,449   | 1,729   | 1,910   | 1,830   | 1,757   | 1,686   |
| 77 SUNY - Albany .....                         | 1,077   | 1,088   | 1,229   | 1,328   | 1,791   | 1,884   | 1,760   | 1,665   |
| 78 Johns Hopkins University .....              | 1,132   | 1,147   | 1,167   | 1,249   | 1,377   | 1,389   | 1,610   | 1,653   |
| 79 Northwestern University .....               | 1,688   | 1,740   | 1,738   | 1,800   | 1,843   | 1,799   | 1,719   | 1,645   |
| 80 Univ of Texas at Arlington .....            | 1,690   | 1,710   | 1,743   | 1,865   | 1,936   | 1,945   | 1,810   | 1,609   |
| Total, 1st 80 institutions .....               | 200,443 | 203,585 | 209,703 | 216,208 | 225,269 | 227,745 | 224,769 | 220,083 |
| 81 University of South Carolina .....          | 1,308   | 1,422   | 1,453   | 1,466   | 1,590   | 1,660   | 1,649   | 1,604   |
| 82 CUNY Graduate School and Univ Center .....  | 1,986   | 1,982   | 1,991   | 1,776   | 1,795   | 1,664   | 1,699   | 1,573   |
| 83 Illinois Institute of Technology .....      | 1,654   | 1,510   | 1,776   | 1,818   | 1,916   | 2,079   | 1,913   | 1,542   |
| 84 Yale University .....                       | 1,709   | 1,690   | 1,693   | 1,620   | 1,581   | 1,561   | 1,549   | 1,539   |
| 85 Polytechnic University .....                | 2,028   | 2,050   | 1,903   | 1,600   | 1,649   | 1,559   | 1,438   | 1,525   |
| 86 Syracuse University .....                   | 2,049   | 1,959   | 1,913   | 1,928   | 2,042   | 1,823   | 1,817   | 1,518   |
| 87 Florida State University .....              | 1,115   | 1,324   | 1,381   | 1,360   | 1,335   | 1,377   | 1,402   | 1,506   |
| 88 University of Delaware .....                | 1,116   | 1,179   | 1,291   | 1,396   | 1,429   | 1,497   | 1,505   | 1,493   |
| 89 Antioch University .....                    | 1,133   | 1,019   | 1,146   | 1,531   | 1,617   | 1,532   | 1,590   | 1,474   |
| 90 De Paul University .....                    | 1,153   | 1,261   | 1,315   | 1,381   | 1,359   | 1,435   | 1,460   | 1,453   |
| Total, 1st 90 institutions .....               | 215,694 | 218,981 | 225,565 | 232,084 | 241,582 | 243,932 | 240,791 | 235,310 |
| 91 Washington State University .....           | 1,174   | 1,097   | 1,159   | 1,255   | 1,306   | 1,359   | 1,421   | 1,450   |
| 92 University of Calif at Santa Barbara .....  | 1,272   | 1,382   | 1,475   | 1,482   | 1,526   | 1,394   | 1,439   | 1,444   |
| 93 Case Western Reserve University .....       | 1,753   | 1,482   | 1,477   | 1,398   | 1,439   | 1,423   | 1,447   | 1,432   |
| 94 Calif State Univ at Long Beach .....        | 1,397   | 1,772   | 1,860   | 1,940   | 1,883   | 1,682   | 1,486   | 1,428   |
| 95 University of Wisconsin - Milwaukee .....   | 1,478   | 1,499   | 1,544   | 1,625   | 1,586   | 1,538   | 1,484   | 1,427   |
| 96 Utah State University .....                 | 1,168   | 1,189   | 1,170   | 1,187   | 1,272   | 1,363   | 1,370   | 1,413   |
| 97 Drexel University .....                     | 1,318   | 1,276   | 1,410   | 1,534   | 1,431   | 1,400   | 1,534   | 1,405   |
| 98 University of California, Irvine .....      | 1,127   | 1,175   | 1,239   | 1,306   | 1,445   | 1,493   | 1,442   | 1,392   |
| 99 Southern Illinois Univ at Carbondale .....  | 1,307   | 1,314   | 1,326   | 1,365   | 1,305   | 1,326   | 1,304   | 1,368   |
| 100 Texas Tech University .....                | 1,022   | 1,146   | 1,254   | 1,371   | 1,541   | 1,487   | 1,432   | 1,343   |
| Total, 1st 100 institutions .....              | 228,710 | 232,313 | 239,479 | 246,547 | 256,316 | 258,397 | 255,150 | 249,412 |
| 101 Duke University .....                      | 1,216   | 1,229   | 1,322   | 1,333   | 1,335   | 1,363   | 1,361   | 1,337   |
| 102 Western Michigan University .....          | 1,262   | 1,214   | 1,352   | 1,536   | 1,543   | 1,566   | 1,548   | 1,326   |
| 103 West Virginia University .....             | 1,028   | 1,022   | 1,154   | 1,234   | 1,320   | 1,443   | 1,409   | 1,324   |
| 104 University of Arkansas .....               | 858     | 857     | 911     | 943     | 1,027   | 1,202   | 1,225   | 1,321   |
| 105 Washington University .....                | 1,277   | 1,347   | 1,456   | 1,353   | 1,390   | 1,361   | 1,339   | 1,308   |
| 106 Princeton University .....                 | 1,248   | 1,327   | 1,334   | 1,374   | 1,379   | 1,367   | 1,298   | 1,307   |
| 107 Stevens Institute of Technology .....      | 1,666   | 1,435   | 1,333   | 1,313   | 1,335   | 1,416   | 1,360   | 1,305   |
| 108 University of Akron .....                  | 1,291   | 1,304   | 1,315   | 1,314   | 1,348   | 1,321   | 1,320   | 1,299   |
| 109 Old Dominion University .....              | 930     | 978     | 1,036   | 1,100   | 1,077   | 1,244   | 1,232   | 1,237   |
| 110 University of Miami .....                  | 1,071   | 1,016   | 1,062   | 1,150   | 1,189   | 1,196   | 1,287   | 1,231   |
| Total, 1st 110 institutions .....              | 240,557 | 244,042 | 251,754 | 259,197 | 269,259 | 271,876 | 268,529 | 262,407 |
| 111 University of North Texas .....            | 1,103   | 1,117   | 1,109   | 1,043   | 1,329   | 1,308   | 1,287   | 1,230   |
| 112 University of Rochester .....              | 1,259   | 1,302   | 1,325   | 1,349   | 1,361   | 1,372   | 1,305   | 1,226   |
| 113 Virginia Commonwealth University .....     | 992     | 963     | 1,173   | 1,144   | 1,160   | 1,157   | 1,139   | 1,213   |
| 114 New Mexico State University .....          | 903     | 856     | 883     | 956     | 1,271   | 1,295   | 1,239   | 1,208   |
| 115 San Diego State University .....           | 1,330   | 1,417   | 1,316   | 1,371   | 1,499   | 1,544   | 1,473   | 1,185   |
| 116 Temple University .....                    | 1,080   | 1,105   | 1,078   | 1,189   | 1,164   | 1,241   | 1,163   | 1,181   |
| 117 Brigham Young University .....             | 724     | 614     | 586     | 927     | 1,016   | 1,069   | 1,193   | 1,154   |
| 118 Long Island University .....               | 750     | 623     | 745     | 862     | 1,112   | 1,142   | 1,041   | 1,137   |
| 119 Vanderbilt University .....                | 801     | 960     | 950     | 965     | 970     | 1,026   | 1,117   | 1,137   |
| 120 Southern Methodist University .....        | 974     | 952     | 901     | 815     | 950     | 997     | 1,031   | 1,131   |
| Total, 1st 120 institutions .....              | 250,473 | 253,951 | 261,820 | 269,818 | 281,091 | 284,027 | 280,517 | 274,209 |

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

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| Institutional ranking                              | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| 121 Cleveland State University .....               | 972     | 989     | 1,044   | 1,142   | 1,141   | 1,160   | 1,151   | 1,122   |
| 122 Mississippi State University .....             | 1,063   | 1,079   | 1,074   | 1,151   | 1,150   | 1,210   | 1,165   | 1,119   |
| 123 Georgia State University .....                 | 852     | 930     | 943     | 950     | 1,025   | 999     | 1,097   | 1,102   |
| 124 Northern Illinois University .....             | 759     | 747     | 933     | 1,023   | 1,025   | 1,065   | 1,097   | 1,100   |
| 125 University of Louisville .....                 | 1,081   | 1,082   | 1,049   | 1,084   | 1,132   | 1,122   | 1,125   | 1,099   |
| 126 University of Rhode Island .....               | 1,064   | 1,081   | 1,100   | 1,095   | 1,149   | 1,148   | 1,129   | 1,096   |
| 127 SUNY - Binghamton .....                        | 1,087   | 1,120   | 1,099   | 1,142   | 1,141   | 1,129   | 1,132   | 1,093   |
| 128 Florida International University .....         | 523     | 577     | 644     | 740     | 783     | 856     | 1,036   | 1,083   |
| 129 Univ of Puerto Rico Rio Piedras Campus .....   | 928     | 998     | 1,100   | 1,008   | 1,096   | 1,138   | 1,129   | 1,083   |
| 130 University of Idaho .....                      | 885     | 960     | 1,048   | 1,068   | 1,063   | 1,115   | 1,145   | 1,081   |
| Total, 1st 130 institutions .....                  | 259,687 | 263,514 | 271,854 | 280,221 | 291,796 | 294,969 | 291,723 | 285,187 |
| 131 California Institute of Technology .....       | 1,010   | 1,065   | 1,088   | 1,125   | 1,152   | 1,131   | 1,087   | 1,073   |
| 132 US Naval Postgraduate School .....             | 1,331   | 1,341   | 1,377   | 1,329   | 1,305   | 1,280   | 1,195   | 1,049   |
| 133 Univ of Maryland - Baltimore County .....      | 819     | 822     | 895     | 1,015   | 1,040   | 1,052   | 1,035   | 1,027   |
| 134 University of Missouri - Rolla .....           | 1,239   | 1,231   | 1,224   | 1,261   | 1,216   | 1,144   | 1,021   | 1,016   |
| 135 New York Institute of Technology .....         | 948     | 961     | 939     | 887     | 1,025   | 997     | 961     | 1,013   |
| 136 Portland State University .....                | 692     | 724     | 832     | 968     | 1,032   | 1,026   | 1,061   | 1,009   |
| 137 Tufts University .....                         | 916     | 906     | 888     | 927     | 999     | 1,044   | 1,061   | 1,008   |
| 138 Lehigh University .....                        | 974     | 1,018   | 764     | 1,022   | 1,114   | 1,099   | 1,085   | 999     |
| 139 Memphis State University .....                 | 787     | 832     | 819     | 851     | 832     | 912     | 987     | 994     |
| 140 New School for Social Research .....           | 1,080   | 1,066   | 984     | 908     | 1,164   | 1,029   | 1,032   | 992     |
| Total, 1st 140 institutions .....                  | 269,483 | 273,480 | 281,664 | 290,514 | 302,675 | 305,683 | 302,248 | 295,367 |
| 141 University of Alabama, The .....               | 704     | 753     | 794     | 882     | 934     | 974     | 963     | 985     |
| 142 University of Nevada at Reno .....             | 600     | 690     | 766     | 825     | 922     | 911     | 956     | 963     |
| 143 Santa Clara University .....                   | 1,642   | 1,494   | 1,293   | 1,222   | 1,226   | 1,144   | 952     | 945     |
| 144 University of Texas at Dallas .....            | 977     | 1,042   | 1,058   | 980     | 1,002   | 1,017   | 946     | 944     |
| 145 Pepperdine University .....                    | 664     | 693     | 731     | 935     | 1,040   | 1,084   | 1,039   | 943     |
| 146 Florida Atlantic University .....              | 512     | 490     | 695     | 822     | 940     | 1,006   | 980     | 929     |
| 147 Ohio University .....                          | 949     | 929     | 940     | 959     | 970     | 942     | 927     | 921     |
| 148 Fielding Institute, The .....                  | 434     | 470     | 473     | 478     | 475     | 513     | 484     | 899     |
| 149 University of Notre Dame .....                 | 745     | 752     | 799     | 804     | 872     | 868     | 855     | 859     |
| 150 Kent State University .....                    | 665     | 725     | 778     | 807     | 830     | 806     | 811     | 849     |
| Total, 1st 150 institutions .....                  | 277,375 | 281,518 | 289,991 | 299,228 | 311,886 | 314,948 | 311,161 | 304,604 |
| 151 Wright State University .....                  | 717     | 732     | 760     | 893     | 909     | 864     | 815     | 845     |
| 152 Fairleigh Dickinson University .....           | 956     | 839     | 912     | 1,005   | 1,070   | 1,020   | 849     | 841     |
| 153 Tulane University .....                        | 505     | 533     | 636     | 751     | 824     | 860     | 897     | 834     |
| 154 University of Alabama in Huntsville, The ..... | 774     | 899     | 934     | 1,018   | 939     | 1,012   | 926     | 819     |
| 155 University of Alabama at Birmingham, The ..... | 597     | 646     | 722     | 759     | 792     | 827     | 815     | 818     |
| 156 University of Toledo .....                     | 563     | 633     | 668     | 695     | 742     | 754     | 750     | 818     |
| 157 University of Wyoming .....                    | 682     | 750     | 734     | 820     | 835     | 877     | 877     | 818     |
| 158 University of Denver .....                     | 615     | 596     | 937     | 944     | 809     | 831     | 858     | 808     |
| 159 Colorado School of Mines .....                 | 700     | 679     | 679     | 781     | 889     | 869     | 851     | 806     |
| 160 Oakland University .....                       | 622     | 639     | 616     | 678     | 665     | 700     | 706     | 803     |
| Total, 1st 160 institutions .....                  | 284,106 | 288,464 | 297,589 | 307,572 | 320,360 | 323,562 | 319,505 | 312,814 |
| 161 University of Calif at Riverside .....         | 701     | 672     | 711     | 733     | 757     | 763     | 729     | 795     |
| 162 University of Oregon .....                     | 794     | 776     | 776     | 822     | 845     | 787     | 778     | 771     |
| 163 University of Detroit Mercy .....              | 495     | 559     | 529     | 599     | 647     | 705     | 776     | 770     |
| 164 Wichita State University .....                 | 637     | 615     | 645     | 643     | 742     | 712     | 705     | 761     |
| 165 Brown University .....                         | 801     | 785     | 769     | 781     | 847     | 797     | 766     | 760     |
| 166 Villanova University .....                     | 958     | 902     | 844     | 959     | 938     | 884     | 857     | 758     |
| 167 Loyola University of Chicago .....             | 462     | 480     | 570     | 610     | 633     | 645     | 701     | 754     |
| 168 Rice University .....                          | 750     | 789     | 800     | 825     | 852     | 844     | 811     | 752     |
| 169 Georgetown University .....                    | 822     | 793     | 609     | 633     | 690     | 693     | 744     | 746     |
| 170 Howard University .....                        | 868     | 808     | 832     | 739     | 657     | 677     | 761     | 741     |
| Total, 1st 170 institutions .....                  | 291,394 | 295,643 | 304,674 | 314,916 | 327,968 | 331,069 | 327,133 | 320,422 |
| 171 University of Maine .....                      | 649     | 667     | 660     | 706     | 811     | 783     | 757     | 737     |
| 172 University of Calif at Santa Cruz .....        | 455     | 555     | 608     | 628     | 671     | 690     | 717     | 732     |
| 173 University of Dayton .....                     | 808     | 706     | 804     | 788     | 739     | 804     | 788     | 727     |
| 174 Emory University .....                         | 418     | 466     | 595     | 549     | 595     | 649     | 685     | 719     |
| 175 Bowling Green State University .....           | 537     | 556     | 538     | 556     | 591     | 659     | 667     | 708     |
| 176 University of Mississippi .....                | 604     | 629     | 620     | 661     | 661     | 659     | 714     | 700     |
| 177 Florida Institute of Technology .....          | 999     | 1,024   | 725     | 882     | 904     | 828     | 801     | 694     |
| 178 University of Vermont .....                    | 612     | 578     | 594     | 623     | 648     | 632     | 629     | 680     |
| 179 Pace University .....                          | 881     | 920     | 885     | 855     | 791     | 845     | 808     | 673     |
| 180 Claremont Graduate School .....                | 517     | 502     | 511     | 552     | 573     | 613     | 683     | 659     |
| Total, 1st 180 institutions .....                  | 297,874 | 302,246 | 311,214 | 321,716 | 334,952 | 338,231 | 334,382 | 327,451 |

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

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| Institutional ranking                              | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| 181 University of New Hampshire .....              | 580     | 577     | 611     | 634     | 669     | 687     | 660     | 658     |
| 182 University of Montana .....                    | 387     | 435     | 493     | 520     | 588     | 601     | 588     | 654     |
| 183 University of Southern Mississippi .....       | 467     | 518     | 480     | 442     | 444     | 462     | 548     | 634     |
| 184 Worcester Polytechnic Institute .....          | 711     | 680     | 725     | 865     | 704     | 712     | 711     | 634     |
| 185 Rochester Institute of Technology .....        | 683     | 747     | 857     | 952     | 1,006   | 896     | 776     | 623     |
| 186 Seton Hall University .....                    | 151     | 164     | 154     | 396     | 413     | 430     | 394     | 610     |
| 187 Catholic University of America .....           | 752     | 709     | 736     | 684     | 736     | 739     | 672     | 602     |
| 188 University of Alaska at Fairbanks .....        | 404     | 444     | 487     | 480     | 571     | 603     | 627     | 600     |
| 189 Montana State University .....                 | 493     | 482     | 451     | 482     | 559     | 626     | 605     | 594     |
| 190 North Dakota State University .....            | 614     | 608     | 549     | 599     | 616     | 590     | 606     | 589     |
| Total, 1st 190 institutions .....                  | 303,116 | 307,610 | 316,757 | 327,770 | 341,258 | 344,577 | 340,569 | 333,649 |
| 191 Yeshiva University .....                       | 580     | 642     | 565     | 607     | 609     | 561     | 571     | 585     |
| 192 Michigan Technological University .....        | 417     | 442     | 464     | 483     | 510     | 554     | 573     | 584     |
| 193 Univ of Puerto Rico Mayaguez Campus .....      | 374     | 364     | 358     | 439     | 495     | 524     | 520     | 582     |
| 194 University of Texas at El Paso .....           | 591     | 583     | 624     | 656     | 755     | 667     | 660     | 578     |
| 195 Calif Sch of Prof Psych - San Diego .....      | 434     | 480     | 519     | 617     | 592     | 643     | 582     | 573     |
| 196 Northern Arizona University .....              | 689     | 726     | 817     | 783     | 763     | 572     | 587     | 572     |
| 197 University of Nevada at Las Vegas .....        | 218     | 252     | 266     | 357     | 421     | 495     | 531     | 567     |
| 198 Univ of Texas Hlth Sci Ctr at Houston .....    | 344     | 364     | 400     | 428     | 495     | 499     | 541     | 560     |
| 199 Marquette University .....                     | 590     | 599     | 620     | 620     | 596     | 578     | 600     | 556     |
| 200 Illinois State University .....                | 472     | 482     | 453     | 505     | 550     | 544     | 514     | 549     |
| Total, 1st 200 institutions .....                  | 307,825 | 312,544 | 321,843 | 333,265 | 347,044 | 350,214 | 346,248 | 339,355 |
| 201 Louisiana Tech University .....                | 206     | 248     | 213     | 284     | 364     | 386     | 345     | 537     |
| 202 Middle Tennessee State University .....        | 322     | 338     | 508     | 529     | 580     | 596     | 557     | 535     |
| 203 University of Nebraska - Omaha .....           | 520     | 451     | 474     | 559     | 630     | 631     | 595     | 535     |
| 204 Saint John's University .....                  | 358     | 366     | 429     | 457     | 533     | 558     | 556     | 530     |
| 205 Brandeis University .....                      | 375     | 392     | 416     | 428     | 432     | 465     | 473     | 524     |
| 206 University of Central Florida .....            | 936     | 914     | 1,066   | 1,218   | 1,352   | 1,457   | 1,615   | 524     |
| 207 Air Force Institute of Technology .....        | 596     | 548     | 653     | 589     | 588     | 550     | 481     | 514     |
| 208 Hahnemann University .....                     | 366     | 269     | 340     | 387     | 396     | 409     | 422     | 513     |
| 209 Union Institute .....                          | 423     | 438     | 446     | 523     | 381     | 724     | 673     | 512     |
| 210 University of Missouri - Kansas City .....     | 566     | 583     | 590     | 552     | 543     | 490     | 431     | 512     |
| Total, 1st 210 institutions .....                  | 312,493 | 317,091 | 326,978 | 338,791 | 352,843 | 356,480 | 352,396 | 344,591 |
| 211 Texas Woman's University .....                 | 588     | 614     | 591     | 510     | 518     | 498     | 508     | 503     |
| 212 South Dakota State University .....            | 344     | 320     | 352     | 482     | 485     | 521     | 498     | 499     |
| 213 Fordham University .....                       | 461     | 470     | 566     | 598     | 584     | 633     | 559     | 491     |
| 214 Miami University .....                         | 448     | 428     | 441     | 458     | 460     | 507     | 518     | 483     |
| 215 Boston College .....                           | 406     | 440     | 429     | 464     | 472     | 475     | 493     | 480     |
| 216 St. Louis University .....                     | 360     | 392     | 381     | 395     | 438     | 453     | 478     | 479     |
| 217 Golden Gate University .....                   | 754     | 618     | 354     | 192     | 215     | 157     | 331     | 476     |
| 218 University of Missouri - St Louis .....        | 309     | 313     | 316     | 281     | 323     | 310     | 425     | 455     |
| 219 California Institute of Integral Studies ..... | 247     | 300     | 250     | 362     | 362     | 447     | 416     | 450     |
| 220 College of William and Mary .....              | 310     | 302     | 334     | 371     | 431     | 432     | 436     | 450     |
| Total, 1st 220 institutions .....                  | 316,720 | 321,288 | 330,992 | 342,904 | 357,131 | 360,913 | 357,058 | 349,357 |
| 221 Ball State University .....                    | 277     | 276     | 349     | 335     | 395     | 412     | 436     | 442     |
| 222 University of Southwestern Louisiana .....     | 457     | 490     | 495     | 562     | 583     | 483     | 466     | 429     |
| 223 Cal Schl of Prof Psych Berkeley/Alameda .....  | 455     | 501     | 512     | 519     | 528     | 508     | 455     | 428     |
| 224 Fuller Theological Seminary .....              | 280     | 295     | 338     | 343     | 352     | 373     | 381     | 416     |
| 225 SUNY - Coll of Env Science and Forestry .....  | 377     | 420     | 455     | 427     | 457     | 428     | 415     | 410     |
| 226 Calif Sch of Prof Psych - Fresno .....         | 207     | 235     | 251     | 366     | 385     | 393     | 370     | 399     |
| 227 Tennessee State University .....               | 282     | 217     | 249     | 226     | 242     | 216     | 327     | 388     |
| 228 Clark Atlanta University .....                 | 0       | 312     | 279     | 323     | 387     | 386     | 418     | 382     |
| 229 Univ of Texas SW Medical Ctr at Dallas .....   | 255     | 265     | 268     | 284     | 349     | 361     | 385     | 381     |
| 230 US International University .....              | 547     | 497     | 519     | 492     | 468     | 473     | 419     | 378     |
| Total, 1st 230 institutions .....                  | 319,857 | 324,796 | 334,707 | 346,781 | 361,277 | 364,946 | 361,130 | 353,410 |
| 231 Idaho State University .....                   | 224     | 296     | 291     | 264     | 291     | 364     | 374     | 377     |
| 232 Sam Houston State University .....             | 373     | 328     | 343     | 362     | 355     | 375     | 386     | 374     |
| 233 Central Michigan University .....              | 260     | 265     | 257     | 292     | 341     | 324     | 353     | 363     |
| 234 Dartmouth College .....                        | 339     | 352     | 339     | 362     | 381     | 384     | 371     | 363     |
| 235 Calif Sch of Prof Psych - Los Angeles .....    | 452     | 501     | 585     | 534     | 495     | 537     | 541     | 361     |
| 236 Clark University .....                         | 237     | 238     | 253     | 275     | 273     | 266     | 261     | 351     |
| 237 University of Tulsa .....                      | 300     | 257     | 260     | 280     | 321     | 339     | 346     | 350     |
| 238 Hofstra University .....                       | 511     | 507     | 451     | 402     | 349     | 342     | 356     | 346     |
| 239 Indiana State University .....                 | 257     | 312     | 252     | 319     | 307     | 330     | 343     | 345     |
| 240 Baylor University .....                        | 258     | 243     | 267     | 284     | 337     | 352     | 363     | 337     |
| Total, 1st 240 institutions .....                  | 323,068 | 328,095 | 338,005 | 350,155 | 364,727 | 368,559 | 364,824 | 356,977 |

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

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| Institutional ranking                              | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| 241 Duquesne University .....                      | 193     | 192     | 227     | 222     | 261     | 280     | 382     | 335     |
| 242 East Carolina University .....                 | 269     | 276     | 249     | 259     | 343     | 375     | 313     | 333     |
| 243 Indiana University of Pennsylvania .....       | 63      | 103     | 123     | 140     | 158     | 203     | 301     | 333     |
| 244 University of North Dakota .....               | 295     | 298     | 292     | 281     | 324     | 339     | 335     | 333     |
| 245 University of Calif at San Francisco .....     | 273     | 277     | 288     | 299     | 299     | 315     | 352     | 330     |
| 246 Jackson State University .....                 | 257     | 277     | 283     | 251     | 263     | 304     | 332     | 328     |
| 247 University of South Alabama .....              | 257     | 283     | 311     | 342     | 362     | 318     | 328     | 326     |
| 248 Caribbean Center for Advanced Studies .....    | 237     | 213     | 216     | 386     | 299     | 181     | 203     | 325     |
| 249 Tennessee Technological University .....       | 264     | 285     | 284     | 323     | 336     | 314     | 319     | 323     |
| 250 East Tennessee State University .....          | 274     | 244     | 253     | 265     | 267     | 311     | 304     | 321     |
| Total, 1st 250 institutions .....                  | 325,450 | 330,543 | 340,531 | 352,923 | 367,639 | 371,499 | 367,993 | 360,264 |
| 251 Pacific Graduate School of Psychology .....    | 0       | 347     | 368     | 341     | 373     | 348     | 351     | 314     |
| 252 Univ of North Carolina at Greensboro .....     | 291     | 282     | 308     | 303     | 351     | 355     | 370     | 305     |
| 253 Thomas Jefferson University .....              | 80      | 90      | 99      | 183     | 212     | 224     | 249     | 297     |
| 254 Lamar University-Beaumont .....                | 257     | 275     | 287     | 401     | 457     | 397     | 349     | 295     |
| 255 Oregon Grad Inst of Science & Technology ..... | 178     | 148     | 188     | 213     | 291     | 320     | 318     | 287     |
| 256 Baylor College of Medicine .....               | 179     | 213     | 239     | 246     | 262     | 279     | 273     | 285     |
| 257 University of Maryland at Baltimore .....      | 288     | 317     | 330     | 355     | 360     | 320     | 324     | 285     |
| 258 University of Hartford .....                   | 181     | 172     | 207     | 235     | 239     | 288     | 271     | 272     |
| 259 Wake Forest University .....                   | 178     | 206     | 215     | 229     | 231     | 245     | 290     | 272     |
| 260 Finch U of Hlth Sci/The Chicago Med Sch .....  | 148     | 113     | 115     | 124     | 130     | 137     | 133     | 269     |
| Total, 1st 260 institutions .....                  | 327,230 | 332,706 | 342,887 | 355,553 | 370,545 | 374,412 | 370,921 | 363,145 |
| 261 Florida A & M University .....                 | 113     | 107     | 102     | 133     | 130     | 177     | 229     | 268     |
| 262 Wright Institute, The .....                    | 161     | 174     | 207     | 199     | 208     | 221     | 242     | 253     |
| 263 Marshall University .....                      | 180     | 163     | 177     | 204     | 198     | 204     | 224     | 250     |
| 264 Adelphi University .....                       | 391     | 434     | 407     | 380     | 387     | 317     | 271     | 248     |
| 265 East Texas State University .....              | 348     | 377     | 363     | 346     | 340     | 303     | 245     | 244     |
| 266 Stephen F. Austin State University .....       | 206     | 205     | 200     | 201     | 231     | 230     | 260     | 243     |
| 267 Clarkson University .....                      | 320     | 308     | 312     | 286     | 279     | 287     | 254     | 239     |
| 268 New York Medical College .....                 | 127     | 114     | 107     | 160     | 179     | 199     | 241     | 239     |
| 269 Medical University of South Carolina .....     | 82      | 105     | 146     | 154     | 173     | 192     | 193     | 237     |
| 270 New Mexico Institute of Mining and Tech .....  | 234     | 217     | 245     | 253     | 260     | 255     | 232     | 222     |
| Total, 1st 270 institutions .....                  | 329,392 | 334,910 | 345,153 | 357,869 | 372,930 | 376,797 | 373,312 | 365,588 |
| 271 University of South Dakota .....               | 153     | 167     | 221     | 202     | 219     | 207     | 207     | 221     |
| 272 South Dakota School of Mines and Tech .....    | 236     | 274     | 259     | 274     | 248     | 219     | 194     | 208     |
| 273 Univ of Med and Dentistry of New Jersey .....  | 205     | 225     | 217     | 239     | 188     | 204     | 225     | 206     |
| 274 Alabama A & M University .....                 | 196     | 206     | 240     | 254     | 268     | 312     | 272     | 202     |
| 275 Medical College of Ohio at Toledo .....        | 0       | 0       | 0       | 0       | 0       | 52      | 227     | 196     |
| 276 Loma Linda University .....                    | 115     | 111     | 92      | 105     | 150     | 138     | 169     | 194     |
| 277 CUNY Mt. Sinai School of Medicine .....        | 130     | 135     | 146     | 164     | 156     | 170     | 169     | 174     |
| 278 University of Northern Iowa .....              | 54      | 51      | 63      | 77      | 74      | 92      | 154     | 173     |
| 279 Chicago School of Prof Psych .....             | 176     | 144     | 158     | 134     | 139     | 148     | 159     | 169     |
| 280 Univ of Texas Hlth Sci Ctr San Antonio .....   | 101     | 124     | 130     | 133     | 157     | 163     | 168     | 169     |
| Total, 1st 280 institutions .....                  | 330,758 | 336,347 | 346,679 | 359,451 | 374,529 | 378,502 | 375,256 | 367,500 |
| 281 University of Northern Colorado .....          | 308     | 147     | 190     | 182     | 224     | 231     | 216     | 166     |
| 282 University of Tennessee, Memphis .....         | 93      | 106     | 110     | 112     | 131     | 150     | 157     | 156     |
| 283 Medical College of Hampton Roads .....         | 78      | 70      | 111     | 118     | 126     | 138     | 156     | 155     |
| 284 Alfred University .....                        | 124     | 143     | 139     | 115     | 124     | 144     | 174     | 154     |
| 285 Mercer University .....                        | 135     | 141     | 84      | 113     | 154     | 147     | 147     | 154     |
| 286 University of La Verne .....                   | 168     | 181     | 141     | 125     | 176     | 202     | 118     | 154     |
| 287 Texas Christian University .....               | 120     | 126     | 131     | 124     | 140     | 149     | 146     | 153     |
| 288 Univ of Texas Med Branch at Galveston .....    | 92      | 102     | 97      | 128     | 139     | 145     | 158     | 152     |
| 289 Forest Institute of Professional Psych .....   | 254     | 260     | 256     | 206     | 185     | 169     | 162     | 148     |
| 290 Biola University .....                         | 166     | 173     | 190     | 188     | 156     | 155     | 149     | 146     |
| Total, 1st 290 institutions .....                  | 332,296 | 337,796 | 348,128 | 360,862 | 376,084 | 380,132 | 376,839 | 369,038 |
| 291 Widener University .....                       | 149     | 178     | 150     | 133     | 143     | 148     | 152     | 145     |
| 292 University of Puerto Rico Med Sci Campus ..... | 60      | 81      | 77      | 113     | 89      | 132     | 128     | 144     |
| 293 Oregon Health Sciences University .....        | 90      | 88      | 102     | 118     | 120     | 126     | 138     | 143     |
| 294 Meharry Medical College .....                  | 27      | 35      | 47      | 54      | 60      | 69      | 144     | 140     |
| 295 Mayo Graduate School of Medicine .....         | 40      | 57      | 84      | 104     | 116     | 120     | 114     | 136     |
| 296 Andrews University .....                       | 58      | 59      | 124     | 131     | 163     | 157     | 139     | 133     |
| 297 Medical College of Wisconsin .....             | 60      | 84      | 91      | 107     | 120     | 119     | 126     | 125     |
| 298 Rockefeller University .....                   | 117     | 121     | 128     | 128     | 134     | 136     | 132     | 125     |
| 299 American International College .....           | 159     | 155     | 170     | 164     | 169     | 123     | 123     | 124     |
| 300 University of Arkansas - Med Sci Campus .....  | 56      | 52      | 49      | 61      | 75      | 104     | 113     | 124     |
| Total, 1st 300 institutions .....                  | 333,112 | 338,706 | 349,150 | 361,975 | 377,273 | 381,366 | 378,148 | 370,377 |

See explanatory information, if any, and SOURCE at end of table.

**Table 34. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1995 total graduate science and engineering students: 1988-95**

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| Institutional ranking                              | 1988    | 1989    | 1990    | 1991    | 1992    | 1993    | 1994    | 1995    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| 301 Hampton University .....                       | 76      | 59      | 58      | 64      | 83      | 90      | 129     | 123     |
| 302 Creighton University .....                     | 132     | 82      | 76      | 71      | 77      | 93      | 53      | 120     |
| 303 Wesleyan University .....                      | 121     | 115     | 121     | 128     | 132     | 139     | 143     | 120     |
| 304 Northeast Louisiana University .....           | 145     | 141     | 104     | 101     | 108     | 118     | 147     | 119     |
| 305 Spalding University .....                      | 138     | 119     | 112     | 107     | 112     | 91      | 115     | 117     |
| 306 Bryn Mawr College .....                        | 127     | 116     | 114     | 154     | 123     | 120     | 111     | 115     |
| 307 Woods Hole Oceanographic Institution .....     | 113     | 0       | 92      | 102     | 113     | 112     | 120     | 115     |
| 308 Albany Medical College .....                   | 95      | 84      | 70      | 70      | 88      | 96      | 95      | 102     |
| 309 Rush University .....                          | 93      | 92      | 95      | 90      | 98      | 103     | 100     | 100     |
| 310 SUNY - Health Sci Ctr at Brooklyn .....        | 83      | 87      | 94      | 98      | 119     | 104     | 94      | 95      |
| Total, 1st 310 institutions .....                  | 334,235 | 339,601 | 350,086 | 362,960 | 378,326 | 382,432 | 379,255 | 371,503 |
| 311 Medical College of Georgia .....               | 71      | 67      | 78      | 82      | 84      | 88      | 96      | 93      |
| 312 University of Maryland Eastern Shore .....     | 39      | 62      | 82      | 104     | 115     | 90      | 104     | 89      |
| 313 Philadelphia Col of Osteopathic Med .....      | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 85      |
| 314 University of Nebraska Medical Center .....    | 63      | 72      | 67      | 60      | 69      | 76      | 81      | 84      |
| 315 Institute of Paper Science & Technology .....  | 69      | 45      | 57      | 70      | 73      | 77      | 79      | 83      |
| 316 Union College .....                            | 151     | 119     | 135     | 144     | 137     | 124     | 98      | 73      |
| 317 SUNY - Health Sci Ctr at Syracuse .....        | 51      | 58      | 50      | 68      | 64      | 72      | 71      | 65      |
| 318 Uniformed Serv Univ of the Hlth Sciences ..... | 92      | 92      | 92      | 88      | 71      | 66      | 57      | 58      |
| 319 RAND Graduate School of Policy Studies .....   | 60      | 60      | 48      | 60      | 55      | 61      | 55      | 56      |
| 320 University of San Diego .....                  | 38      | 50      | 52      | 42      | 38      | 47      | 58      | 56      |
| Total, 1st 320 institutions .....                  | 334,869 | 340,226 | 350,747 | 363,678 | 379,032 | 383,133 | 379,954 | 372,245 |
| 321 University of the Pacific .....                | 63      | 59      | 46      | 59      | 51      | 48      | 54      | 51      |
| 322 CUNY Herbert H. Lehman College .....           | 75      | 75      | 78      | 61      | 53      | 65      | 72      | 41      |
| 323 Maharishi University of Management .....       | 28      | 68      | 77      | 76      | 64      | 51      | 48      | 33      |
| 324 Philadelphia Coll of Pharmacy and Sci .....    | 25      | 24      | 31      | 29      | 31      | 33      | 29      | 30      |
| 325 Institute of Textile Technology .....          | 35      | 30      | 30      | 30      | 28      | 34      | 29      | 25      |
| 326 Catholic University of Puerto Rico .....       | 0       | 0       | 0       | 0       | 0       | 15      | 20      | 20      |
| 327 Mass College of Pharmacy/Allied Health .....   | 15      | 17      | 25      | 24      | 24      | 20      | 20      | 20      |
| 328 Ponce School of Medicine .....                 | 21      | 22      | 19      | 15      | 13      | 14      | 12      | 16      |
| 329 Morehouse School of Medicine .....             | 0       | 0       | 0       | 0       | 4       | 9       | 21      | 12      |
| 330 Baylor College of Dentistry .....              | 2       | 0       | 3       | 6       | 7       | 9       | 7       | 9       |
| Total, 1st 330 institutions .....                  | 335,133 | 340,521 | 351,056 | 363,978 | 379,307 | 383,431 | 380,266 | 372,502 |
| 331 Smith College .....                            | 5       | 6       | 5       | 6       | 8       | 7       | 4       | 4       |
| 332 Atlanta University .....                       | 389     | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 333 Charles R. Drew Univ of Medicine & Sci .....   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 334 Emerson College .....                          | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 335 Kirksville College of Osteopathic Med .....    | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 336 Medical College of Pennsylvania, The .....     | 69      | 72      | 72      | 78      | 85      | 73      | 80      | 0       |
| 337 Midwestern University .....                    | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 338 Oral Roberts University .....                  | 6       | 13      | 0       | 0       | 0       | 0       | 0       | 0       |
| 339 Pacific University .....                       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 340 SUNY College of Optometry .....                | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Total, 1st 340 institutions .....                  | 335,602 | 340,612 | 351,133 | 364,062 | 379,400 | 383,511 | 380,350 | 372,506 |
| 341 U of North TX Hlth Sci Ctr at Ft Worth .....   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 342 Univ of Osteopathic Med & Health Sci .....     | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 343 Univ of Texas M.D. Anderson Cancer Ctr .....   | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| 344 University of New England .....                | 0       | 0       | 13      | 9       | 3       | 3       | 0       | 0       |
| 345 Xavier University of Louisiana .....           | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Total, 1st 345 institutions .....                  | 335,602 | 340,612 | 351,146 | 364,071 | 379,403 | 383,514 | 380,350 | 372,506 |

**NOTE:** Includes medical schools

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 35. Graduate students in science, engineering, and health fields  
in master's-granting institutions, by field: 1988-95**

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| Field                                       | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Total, all surveyed fields .....            | 47,059 | 49,837 | 54,042 | 57,744 | 61,395 | 64,367 | 64,095 | 65,182 |
| Total, science and engineering fields ..... | 39,685 | 42,157 | 46,013 | 48,637 | 51,394 | 52,719 | 51,408 | 51,416 |
| Sciences, total .....                       | 33,451 | 35,477 | 38,187 | 40,322 | 42,517 | 44,283 | 43,582 | 43,839 |
| Physical sciences .....                     | 1,537  | 1,642  | 1,611  | 1,769  | 1,712  | 1,795  | 1,740  | 1,675  |
| Astronomy .....                             | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Chemistry .....                             | 1,005  | 1,036  | 1,004  | 1,044  | 1,033  | 1,081  | 1,055  | 1,076  |
| Physics .....                               | 415    | 464    | 482    | 526    | 465    | 456    | 451    | 379    |
| Physical sciences, n.e.c. .....             | 117    | 142    | 125    | 199    | 214    | 258    | 234    | 220    |
| Earth, atmospheric, & ocean sciences .....  | 1,083  | 1,049  | 1,132  | 1,322  | 1,580  | 1,761  | 1,822  | 1,768  |
| Atmospheric sciences .....                  | 11     | 12     | 4      | 12     | 13     | 17     | 19     | 10     |
| Geosciences .....                           | 513    | 442    | 458    | 462    | 475    | 460    | 481    | 494    |
| Oceanography .....                          | 107    | 117    | 117    | 112    | 128    | 138    | 175    | 154    |
| Earth, atmos., & ocean sci., n.e.c. ....    | 452    | 478    | 553    | 736    | 964    | 1,146  | 1,147  | 1,110  |
| Mathematical sciences .....                 | 1,967  | 2,141  | 2,258  | 2,097  | 2,190  | 2,305  | 2,199  | 2,155  |
| Mathematics & applied mathematics .....     | 1,926  | 2,097  | 2,211  | 2,049  | 2,125  | 2,227  | 2,121  | 2,074  |
| Statistics .....                            | 41     | 44     | 47     | 48     | 65     | 78     | 78     | 81     |
| Computer sciences .....                     | 5,556  | 5,722  | 6,272  | 6,387  | 6,602  | 6,171  | 5,460  | 5,369  |
| Agricultural sciences .....                 | 682    | 666    | 709    | 710    | 698    | 746    | 741    | 791    |
| Biological sciences .....                   | 3,398  | 3,609  | 3,612  | 3,675  | 3,973  | 4,409  | 4,538  | 4,871  |
| Anatomy .....                               | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Biochemistry .....                          | 34     | 41     | 36     | 41     | 44     | 62     | 67     | 59     |
| Biology .....                               | 2,634  | 2,747  | 2,800  | 2,784  | 2,920  | 3,151  | 3,166  | 3,423  |
| Biometry/epidemiology .....                 | 0      | 0      | 0      | 1      | 0      | 0      | 0      | 0      |
| Biophysics .....                            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Botany .....                                | 25     | 16     | 21     | 21     | 24     | 9      | 7      | 4      |
| Cell biology .....                          | 0      | 0      | 0      | 0      | 0      | 12     | 15     | 16     |
| Ecology .....                               | 65     | 72     | 94     | 101    | 146    | 159    | 146    | 172    |
| Entomology/parasitology .....               | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Genetics .....                              | 42     | 44     | 44     | 42     | 40     | 52     | 50     | 49     |
| Microbio., immunology, & virology .....     | 48     | 41     | 43     | 38     | 40     | 31     | 27     | 27     |
| Nutrition .....                             | 293    | 335    | 275    | 289    | 349    | 450    | 595    | 666    |
| Pathology .....                             | 57     | 66     | 67     | 71     | 77     | 90     | 104    | 95     |
| Pharmacology .....                          | 1      | 2      | 0      | 0      | 0      | 2      | 0      | 0      |
| Physiology .....                            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Zoology .....                               | 12     | 14     | 13     | 23     | 22     | 5      | 7      | 5      |
| Biosciences, n.e.c. ....                    | 187    | 231    | 219    | 264    | 311    | 386    | 354    | 355    |
| Psychology .....                            | 10,324 | 11,168 | 12,348 | 13,577 | 14,341 | 15,199 | 15,038 | 14,878 |
| Psychology, general .....                   | 4,110  | 4,532  | 5,179  | 6,145  | 7,292  | 7,396  | 7,576  | 7,577  |
| Clinical psychology .....                   | 5,211  | 5,572  | 5,947  | 6,110  | 5,449  | 6,080  | 5,584  | 5,575  |
| Psychology, n.e.c. ....                     | 1,003  | 1,064  | 1,222  | 1,322  | 1,600  | 1,723  | 1,878  | 1,726  |
| Social sciences .....                       | 8,904  | 9,480  | 10,245 | 10,785 | 11,421 | 11,897 | 12,044 | 12,332 |
| Agricultural economics .....                | 50     | 49     | 41     | 53     | 68     | 81     | 67     | 46     |
| Anthropology (cultural & social) .....      | 263    | 248    | 269    | 294    | 308    | 297    | 251    | 274    |
| Economics (except agricultural) .....       | 795    | 802    | 762    | 822    | 906    | 849    | 761    | 788    |
| Geography .....                             | 584    | 648    | 606    | 620    | 652    | 706    | 717    | 625    |
| History and philosophy of science .....     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Linguistics .....                           | 327    | 310    | 290    | 290    | 347    | 374    | 342    | 337    |
| Political science .....                     | 4,662  | 5,115  | 5,461  | 5,606  | 5,784  | 5,937  | 5,946  | 6,157  |
| Sociology .....                             | 651    | 696    | 808    | 997    | 1,099  | 1,162  | 1,243  | 1,274  |
| Sociology/anthropology .....                | 79     | 76     | 87     | 75     | 77     | 94     | 110    | 101    |
| Social sciences, n.e.c. ....                | 1,493  | 1,536  | 1,921  | 2,028  | 2,180  | 2,397  | 2,607  | 2,730  |
| Engineering, total .....                    | 6,234  | 6,680  | 7,826  | 8,315  | 8,877  | 8,436  | 7,826  | 7,577  |
| Aerospace engineering .....                 | 37     | 67     | 91     | 67     | 37     | 35     | 62     | 56     |
| Agricultural engineering .....              | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Biomedical engineering .....                | 79     | 66     | 63     | 48     | 52     | 62     | 76     | 70     |
| Chemical engineering .....                  | 134    | 104    | 136    | 152    | 171    | 158    | 139    | 141    |
| Civil engineering .....                     | 975    | 893    | 1,027  | 1,283  | 1,605  | 1,638  | 1,581  | 1,474  |
| Electrical engineering .....                | 1,935  | 2,592  | 3,077  | 3,179  | 3,436  | 3,136  | 2,874  | 2,832  |
| Engineering science .....                   | 219    | 19     | 18     | 30     | 33     | 32     | 20     | 10     |
| Industrial eng./manufacturing eng. ....     | 737    | 932    | 1,157  | 1,213  | 1,206  | 1,171  | 1,130  | 1,218  |
| Mechanical engineering .....                | 1,043  | 1,090  | 1,210  | 1,115  | 1,178  | 1,073  | 919    | 775    |
| Metallurgical/materials eng. ....           | 80     | 84     | 105    | 125    | 159    | 147    | 120    | 99     |
| Mining engineering .....                    | 39     | 30     | 28     | 14     | 11     | 16     | 25     | 11     |
| Nuclear engineering .....                   | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Petroleum engineering .....                 | 31     | 14     | 14     | 11     | 16     | 14     | 19     | 42     |
| Engineering, n.e.c. ....                    | 925    | 789    | 900    | 1,078  | 973    | 954    | 861    | 849    |

See explanatory information, if any, and SOURCE at end of table.

**Table 35. Graduate students in science, engineering, and health fields  
in master's-granting institutions, by field: 1988-95**

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| Field                                      | 1988  | 1989  | 1990  | 1991  | 1992   | 1993   | 1994   | 1995   |
|--|-------|-------|-------|-------|--------|--------|--------|--------|
| Total, health fields .....                 | 7,374 | 7,680 | 8,029 | 9,107 | 10,001 | 11,648 | 12,687 | 13,766 |
| Medical fields .....                       | 457   | 452   | 472   | 610   | 733    | 960    | 1,019  | 1,118  |
| Anesthesiology .....                       | 77    | 79    | 62    | 86    | 197    | 225    | 213    | 220    |
| Cardiology .....                           | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Oncology/cancer research .....             | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Endocrinology .....                        | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Gastroenterology .....                     | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Hematology .....                           | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Neurology .....                            | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Obstetrics and gynecology .....            | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Ophthalmology .....                        | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Otorhinolaryngology .....                  | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Pediatrics .....                           | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Preventive medicine/community health ..... | 226   | 214   | 256   | 361   | 321    | 506    | 555    | 605    |
| Psychiatry .....                           | 48    | 44    | 51    | 58    | 51     | 69     | 81     | 91     |
| Pulmonary disease .....                    | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Radiology .....                            | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 46     |
| Surgery .....                              | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Clinical medicine, n.e.c. .....            | 106   | 115   | 103   | 105   | 164    | 160    | 170    | 156    |
| Other health fields .....                  | 6,917 | 7,228 | 7,557 | 8,497 | 9,268  | 10,688 | 11,668 | 12,648 |
| Dental sciences .....                      | 0     | 0     | 0     | 0     | 0      | 0      | 0      | 0      |
| Nursing .....                              | 2,519 | 2,615 | 2,726 | 3,231 | 3,458  | 4,173  | 4,601  | 5,170  |
| Pharmaceutical sciences .....              | 4     | 8     | 2     | 1     | 16     | 20     | 11     | 22     |
| Speech pathology/audiology .....           | 1,725 | 1,922 | 2,103 | 2,369 | 2,430  | 2,901  | 3,220  | 3,587  |
| Veterinary sciences .....                  | 17    | 19    | 19    | 19    | 19     | 24     | 17     | 14     |
| Health related, n.e.c. .....               | 2,652 | 2,664 | 2,707 | 2,877 | 3,345  | 3,570  | 3,819  | 3,855  |

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 36. Full-time graduate students in science, engineering, and health fields  
in master's-granting institutions, by field: 1988-95**

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| Field                                       | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Total, all surveyed fields .....            | 16,173 | 16,714 | 18,258 | 20,026 | 21,773 | 22,934 | 23,710 | 24,583 |
| Total, science and engineering fields ..... | 13,796 | 14,230 | 15,592 | 16,664 | 18,166 | 18,501 | 18,427 | 18,699 |
| Sciences, total .....                       | 11,914 | 12,352 | 13,561 | 14,621 | 15,754 | 16,215 | 16,239 | 16,615 |
| Physical sciences .....                     | 707    | 746    | 670    | 712    | 640    | 706    | 724    | 683    |
| Astronomy .....                             | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Chemistry .....                             | 474    | 462    | 403    | 413    | 363    | 418    | 414    | 422    |
| Physics .....                               | 212    | 256    | 246    | 273    | 260    | 244    | 254    | 218    |
| Physical sciences, n.e.c. ....              | 21     | 28     | 21     | 26     | 17     | 44     | 56     | 43     |
| Earth, atmospheric, & ocean sciences .....  | 446    | 396    | 408    | 473    | 534    | 601    | 617    | 579    |
| Atmospheric sciences .....                  | 4      | 7      | 0      | 2      | 1      | 2      | 12     | 3      |
| Geosciences .....                           | 241    | 187    | 199    | 166    | 192    | 181    | 182    | 204    |
| Oceanography .....                          | 53     | 47     | 47     | 60     | 72     | 47     | 70     | 45     |
| Earth, atmos., & ocean sci., n.e.c. ....    | 148    | 155    | 162    | 245    | 269    | 371    | 353    | 327    |
| Mathematical sciences .....                 | 681    | 633    | 631    | 662    | 705    | 740    | 772    | 711    |
| Computer sciences .....                     | 1,485  | 1,487  | 1,905  | 1,764  | 1,829  | 1,638  | 1,378  | 1,378  |
| Agricultural sciences .....                 | 391    | 380    | 387    | 439    | 366    | 419    | 368    | 434    |
| Biological sciences .....                   | 1,411  | 1,459  | 1,431  | 1,483  | 1,617  | 1,884  | 1,869  | 1,973  |
| Anatomy .....                               | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Biochemistry .....                          | 11     | 17     | 17     | 14     | 15     | 37     | 22     | 39     |
| Biology .....                               | 1,167  | 1,198  | 1,188  | 1,209  | 1,291  | 1,452  | 1,450  | 1,484  |
| Biometry/epidemiology .....                 | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Biophysics .....                            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Botany .....                                | 20     | 12     | 13     | 18     | 22     | 2      | 4      | 3      |
| Cell biology .....                          | 0      | 0      | 0      | 0      | 0      | 3      | 4      | 2      |
| Ecology .....                               | 14     | 7      | 6      | 11     | 21     | 17     | 16     | 28     |
| Entomology/parasitology .....               | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Genetics .....                              | 41     | 43     | 42     | 41     | 38     | 50     | 49     | 47     |
| Microbio., immunology, & virology .....     | 7      | 8      | 11     | 7      | 15     | 7      | 7      | 7      |
| Nutrition .....                             | 81     | 97     | 59     | 58     | 92     | 138    | 152    | 163    |
| Pathology .....                             | 9      | 15     | 28     | 28     | 27     | 32     | 30     | 32     |
| Pharmacology .....                          | 0      | 0      | 0      | 0      | 0      | 1      | 0      | 0      |
| Physiology .....                            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Zoology .....                               | 11     | 8      | 6      | 22     | 21     | 4      | 5      | 5      |
| Biosciences, n.e.c. ....                    | 50     | 54     | 61     | 75     | 75     | 141    | 130    | 163    |
| Psychology .....                            | 4,240  | 4,573  | 5,162  | 5,791  | 6,499  | 6,636  | 6,844  | 7,040  |
| Social sciences .....                       | 2,553  | 2,678  | 2,967  | 3,297  | 3,564  | 3,591  | 3,667  | 3,817  |
| Agricultural economics .....                | 31     | 27     | 27     | 35     | 36     | 53     | 44     | 29     |
| Anthropology (cultural & social) .....      | 79     | 91     | 90     | 102    | 118    | 110    | 119    | 130    |
| Economics (except agricultural) .....       | 272    | 271    | 282    | 331    | 389    | 350    | 310    | 361    |
| Geography .....                             | 247    | 252    | 223    | 241    | 254    | 292    | 319    | 257    |
| Linguistics .....                           | 62     | 59     | 34     | 39     | 76     | 91     | 98     | 104    |
| Political science .....                     | 1,161  | 1,242  | 1,440  | 1,577  | 1,609  | 1,565  | 1,559  | 1,639  |
| Sociology .....                             | 262    | 279    | 306    | 364    | 418    | 469    | 445    | 428    |
| Sociology/anthropology .....                | 28     | 26     | 38     | 41     | 39     | 26     | 49     | 46     |
| Social sciences, other .....                | 411    | 431    | 527    | 567    | 625    | 635    | 724    | 823    |
| Engineering, total .....                    | 1,882  | 1,878  | 2,031  | 2,043  | 2,412  | 2,286  | 2,188  | 2,084  |
| Aerospace engineering .....                 | 16     | 30     | 64     | 67     | 37     | 35     | 33     | 25     |
| Agricultural engineering .....              | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Biomedical engineering .....                | 53     | 39     | 37     | 25     | 29     | 35     | 46     | 38     |
| Chemical engineering .....                  | 68     | 34     | 38     | 55     | 73     | 71     | 78     | 68     |
| Civil engineering .....                     | 329    | 293    | 256    | 340    | 469    | 506    | 486    | 486    |
| Electrical engineering .....                | 658    | 739    | 757    | 732    | 827    | 747    | 723    | 664    |
| Engineering science .....                   | 13     | 10     | 11     | 7      | 7      | 2      | 4      | 2      |
| Industrial eng./manufacturing eng. ....     | 145    | 194    | 290    | 203    | 258    | 237    | 244    | 266    |
| Mechanical engineering .....                | 253    | 249    | 300    | 291    | 363    | 293    | 251    | 213    |
| Metallurgical/materials eng. ....           | 18     | 24     | 20     | 20     | 19     | 23     | 24     | 16     |
| Nuclear engineering .....                   | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Engineering, other .....                    | 329    | 266    | 258    | 303    | 330    | 337    | 299    | 306    |
| Total, health fields .....                  | 2,377  | 2,484  | 2,666  | 3,362  | 3,607  | 4,433  | 5,283  | 5,884  |
| Clinical fields .....                       | 114    | 127    | 109    | 129    | 165    | 169    | 184    | 176    |
| Dental sciences .....                       | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Nursing .....                               | 623    | 606    | 595    | 814    | 806    | 911    | 1,159  | 1,355  |
| Pharmaceutical sciences .....               | 1      | 0      | 0      | 0      | 0      | 3      | 0      | 0      |
| Preventive medicine/community health .....  | 52     | 43     | 65     | 62     | 54     | 109    | 106    | 129    |
| Speech pathology/audiology .....            | 923    | 1,087  | 1,199  | 1,504  | 1,581  | 1,983  | 2,235  | 2,534  |
| Veterinary sciences .....                   | 17     | 19     | 11     | 11     | 11     | 20     | 17     | 14     |
| Other health fields .....                   | 647    | 602    | 687    | 842    | 990    | 1,238  | 1,582  | 1,676  |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 37. Part-time graduate students in science, engineering, and health fields  
in master's-granting institutions, by field: 1988-95**

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| Field                                       | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Total, all surveyed fields .....            | 30,886 | 33,123 | 35,784 | 37,718 | 39,622 | 41,433 | 40,385 | 40,599 |
| Total, science and engineering fields ..... | 25,889 | 27,927 | 30,421 | 31,973 | 33,228 | 34,218 | 32,981 | 32,717 |
| Sciences, total .....                       | 21,537 | 23,125 | 24,626 | 25,701 | 26,763 | 28,068 | 27,343 | 27,224 |
| Physical sciences .....                     | 830    | 896    | 941    | 1,057  | 1,072  | 1,089  | 1,016  | 992    |
| Astronomy .....                             | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Chemistry .....                             | 531    | 574    | 601    | 631    | 670    | 663    | 641    | 654    |
| Physics .....                               | 203    | 208    | 236    | 253    | 205    | 212    | 197    | 161    |
| Physical sciences, n.e.c. .....             | 96     | 114    | 104    | 173    | 197    | 214    | 178    | 177    |
| Earth, atmospheric, & ocean sciences .....  | 637    | 653    | 724    | 849    | 1,046  | 1,160  | 1,205  | 1,189  |
| Atmospheric sciences .....                  | 7      | 5      | 4      | 10     | 12     | 15     | 7      | 7      |
| Geosciences .....                           | 272    | 255    | 259    | 296    | 283    | 279    | 299    | 290    |
| Oceanography .....                          | 54     | 70     | 70     | 52     | 56     | 91     | 105    | 109    |
| Earth, atmos., & ocean sci., n.e.c. .....   | 304    | 323    | 391    | 491    | 695    | 775    | 794    | 783    |
| Mathematical sciences .....                 | 1,286  | 1,508  | 1,627  | 1,435  | 1,485  | 1,565  | 1,427  | 1,444  |
| Computer sciences .....                     | 4,071  | 4,235  | 4,367  | 4,623  | 4,773  | 4,533  | 4,082  | 3,991  |
| Agricultural sciences .....                 | 291    | 286    | 322    | 271    | 332    | 327    | 373    | 357    |
| Biological sciences .....                   | 1,987  | 2,150  | 2,181  | 2,192  | 2,356  | 2,525  | 2,669  | 2,898  |
| Anatomy .....                               | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Biochemistry .....                          | 23     | 24     | 19     | 27     | 29     | 25     | 45     | 20     |
| Biology .....                               | 1,467  | 1,549  | 1,612  | 1,575  | 1,629  | 1,699  | 1,716  | 1,939  |
| Biometry/epidemiology .....                 | 0      | 0      | 0      | 1      | 0      | 0      | 0      | 0      |
| Biophysics .....                            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Botany .....                                | 5      | 4      | 8      | 3      | 2      | 7      | 3      | 1      |
| Cell biology .....                          | 0      | 0      | 0      | 0      | 0      | 9      | 11     | 14     |
| Ecology .....                               | 51     | 65     | 88     | 90     | 125    | 142    | 130    | 144    |
| Entomology/parasitology .....               | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Genetics .....                              | 1      | 1      | 2      | 1      | 2      | 2      | 1      | 2      |
| Microbio., immunology, & virology .....     | 41     | 33     | 32     | 31     | 25     | 24     | 20     | 20     |
| Nutrition .....                             | 212    | 238    | 216    | 231    | 257    | 312    | 443    | 503    |
| Pathology .....                             | 48     | 51     | 39     | 43     | 50     | 58     | 74     | 63     |
| Pharmacology .....                          | 1      | 2      | 0      | 0      | 0      | 1      | 0      | 0      |
| Physiology .....                            | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Zoology .....                               | 1      | 6      | 7      | 1      | 1      | 1      | 2      | 0      |
| Biosciences, n.e.c. .....                   | 137    | 177    | 158    | 189    | 236    | 245    | 224    | 192    |
| Psychology .....                            | 6,084  | 6,595  | 7,186  | 7,786  | 7,842  | 8,563  | 8,194  | 7,838  |
| Social sciences .....                       | 6,351  | 6,802  | 7,278  | 7,488  | 7,857  | 8,306  | 8,377  | 8,515  |
| Agricultural economics .....                | 19     | 22     | 14     | 18     | 32     | 28     | 23     | 17     |
| Anthropology (cultural & social) .....      | 184    | 157    | 179    | 192    | 190    | 187    | 132    | 144    |
| Economics (except agricultural) .....       | 523    | 531    | 480    | 491    | 517    | 499    | 451    | 427    |
| Geography .....                             | 337    | 396    | 383    | 379    | 398    | 414    | 398    | 368    |
| Linguistics .....                           | 265    | 251    | 256    | 251    | 271    | 283    | 244    | 233    |
| Political science .....                     | 3,501  | 3,873  | 4,021  | 4,029  | 4,175  | 4,372  | 4,387  | 4,518  |
| Sociology .....                             | 389    | 417    | 502    | 633    | 681    | 693    | 798    | 846    |
| Sociology/anthropology .....                | 51     | 50     | 49     | 34     | 38     | 68     | 61     | 55     |
| Social sciences, other .....                | 1,082  | 1,105  | 1,394  | 1,461  | 1,555  | 1,762  | 1,883  | 1,907  |
| Engineering, total .....                    | 4,352  | 4,802  | 5,795  | 6,272  | 6,465  | 6,150  | 5,638  | 5,493  |
| Aerospace engineering .....                 | 21     | 37     | 27     | 0      | 0      | 0      | 29     | 31     |
| Agricultural engineering .....              | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Biomedical engineering .....                | 26     | 27     | 26     | 23     | 23     | 27     | 30     | 32     |
| Chemical engineering .....                  | 66     | 70     | 98     | 97     | 98     | 87     | 61     | 73     |
| Civil engineering .....                     | 646    | 600    | 771    | 943    | 1,136  | 1,132  | 1,095  | 988    |
| Electrical engineering .....                | 1,277  | 1,853  | 2,320  | 2,447  | 2,609  | 2,389  | 2,151  | 2,168  |
| Engineering science .....                   | 206    | 9      | 7      | 23     | 26     | 30     | 16     | 8      |
| Industrial eng./manufacturing eng. ....     | 592    | 738    | 867    | 1,010  | 948    | 934    | 886    | 952    |
| Mechanical engineering .....                | 790    | 841    | 910    | 824    | 815    | 780    | 668    | 562    |
| Metallurgical/materials eng. ....           | 62     | 60     | 85     | 105    | 140    | 124    | 96     | 83     |
| Nuclear engineering .....                   | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Engineering, other .....                    | 666    | 567    | 684    | 800    | 670    | 647    | 606    | 596    |
| Total, health fields .....                  | 4,997  | 5,196  | 5,363  | 5,745  | 6,394  | 7,215  | 7,404  | 7,882  |
| Clinical fields .....                       | 117    | 111    | 107    | 120    | 247    | 285    | 280    | 337    |
| Dental sciences .....                       | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Nursing .....                               | 1,896  | 2,009  | 2,131  | 2,417  | 2,652  | 3,262  | 3,442  | 3,815  |
| Pharmaceutical sciences .....               | 3      | 8      | 2      | 1      | 16     | 17     | 11     | 22     |
| Preventive medicine/community health .....  | 174    | 171    | 191    | 299    | 267    | 397    | 449    | 476    |
| Speech pathology/audiology .....            | 802    | 835    | 904    | 865    | 849    | 918    | 985    | 1,053  |
| Veterinary sciences .....                   | 0      | 0      | 8      | 8      | 8      | 4      | 0      | 0      |
| Other health fields .....                   | 2,005  | 2,062  | 2,020  | 2,035  | 2,355  | 2,332  | 2,237  | 2,179  |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 38. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions,  
by field: 1988-95**

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| Field                                       | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|
| Total, all surveyed fields .....            | 26,083 | 27,878 | 29,515 | 30,800 | 32,682 | 34,263 | 36,301 | 35,379 |
| Total, science and engineering fields ..... | 19,687 | 20,864 | 21,770 | 22,808 | 23,825 | 24,599 | 25,727 | 25,995 |
| Sciences, total .....                       | 18,002 | 18,952 | 19,831 | 20,565 | 21,474 | 22,165 | 23,137 | 23,367 |
| Physical sciences .....                     | 5,185  | 5,355  | 5,565  | 5,690  | 5,757  | 5,636  | 5,844  | 5,768  |
| Astronomy .....                             | 147    | 186    | 184    | 210    | 206    | 219    | 246    | 263    |
| Chemistry .....                             | 3,421  | 3,457  | 3,630  | 3,647  | 3,564  | 3,555  | 3,710  | 3,581  |
| Physics .....                               | 1,584  | 1,683  | 1,723  | 1,813  | 1,948  | 1,823  | 1,844  | 1,821  |
| Physical sciences, n.e.c. ....              | 33     | 29     | 28     | 20     | 39     | 39     | 44     | 103    |
| Earth, atmospheric, & ocean sciences .....  | 493    | 450    | 591    | 623    | 690    | 762    | 815    | 841    |
| Atmospheric sciences .....                  | 71     | 58     | 57     | 59     | 64     | 81     | 89     | 88     |
| Geosciences .....                           | 273    | 265    | 343    | 369    | 399    | 423    | 435    | 434    |
| Oceanography .....                          | 116    | 107    | 170    | 161    | 186    | 204    | 237    | 258    |
| Earth, atmos., & ocean sci., n.e.c. ....    | 33     | 20     | 21     | 34     | 41     | 54     | 54     | 61     |
| Mathematical sciences .....                 | 284    | 224    | 248    | 206    | 201    | 224    | 239    | 255    |
| Computer sciences .....                     | 91     | 78     | 71     | 120    | 144    | 164    | 183    | 212    |
| Agricultural sciences .....                 | 464    | 517    | 524    | 565    | 630    | 698    | 705    | 690    |
| Biological sciences .....                   | 10,667 | 11,425 | 11,930 | 12,478 | 13,172 | 13,785 | 14,417 | 14,658 |
| Anatomy .....                               | 377    | 460    | 463    | 509    | 496    | 462    | 503    | 528    |
| Biochemistry .....                          | 2,078  | 2,216  | 2,174  | 2,120  | 2,157  | 2,368  | 2,379  | 2,410  |
| Biology .....                               | 1,225  | 1,278  | 1,358  | 1,397  | 1,475  | 1,460  | 1,576  | 1,601  |
| Biometry/epidemiology .....                 | 70     | 100    | 97     | 100    | 122    | 131    | 128    | 143    |
| Biophysics .....                            | 124    | 138    | 118    | 156    | 176    | 176    | 184    | 230    |
| Botany .....                                | 445    | 447    | 449    | 488    | 492    | 511    | 590    | 654    |
| Cell biology .....                          | 884    | 966    | 1,258  | 1,264  | 1,308  | 1,441  | 1,649  | 1,725  |
| Ecology .....                               | 33     | 52     | 57     | 49     | 60     | 65     | 88     | 96     |
| Entomology/parasitology .....               | 176    | 219    | 212    | 236    | 223    | 223    | 190    | 179    |
| Genetics .....                              | 504    | 535    | 614    | 625    | 671    | 665    | 661    | 731    |
| Microbio., immunology, & virology .....     | 1,392  | 1,519  | 1,469  | 1,715  | 1,784  | 1,881  | 1,924  | 1,952  |
| Nutrition .....                             | 138    | 127    | 131    | 171    | 196    | 210    | 192    | 186    |
| Pathology .....                             | 803    | 880    | 1,018  | 1,075  | 1,170  | 1,202  | 1,256  | 1,180  |
| Pharmacology .....                          | 991    | 1,033  | 1,104  | 1,153  | 1,286  | 1,327  | 1,375  | 1,408  |
| Physiology .....                            | 1,034  | 1,067  | 1,043  | 1,060  | 1,139  | 1,150  | 1,109  | 1,026  |
| Zoology .....                               | 181    | 195    | 162    | 161    | 165    | 174    | 171    | 164    |
| Biosciences, n.e.c. ....                    | 212    | 193    | 203    | 199    | 252    | 339    | 442    | 445    |
| Psychology .....                            | 498    | 536    | 464    | 504    | 520    | 518    | 544    | 572    |
| Social sciences .....                       | 320    | 367    | 438    | 379    | 360    | 378    | 390    | 371    |
| Agricultural economics .....                | 20     | 28     | 57     | 39     | 49     | 46     | 45     | 39     |
| Anthropology (cultural & social) .....      | 56     | 74     | 64     | 51     | 59     | 52     | 57     | 67     |
| Economics (except agricultural) .....       | 9      | 33     | 37     | 40     | 22     | 38     | 46     | 26     |
| Geography .....                             | 22     | 22     | 19     | 15     | 22     | 28     | 26     | 20     |
| Linguistics .....                           | 36     | 30     | 38     | 14     | 26     | 29     | 20     | 16     |
| Political science .....                     | 49     | 41     | 66     | 78     | 49     | 35     | 44     | 36     |
| Sociology .....                             | 73     | 75     | 94     | 90     | 72     | 72     | 78     | 85     |
| Sociology/anthropology .....                | 1      | 0      | 2      | 1      | 3      | 5      | 4      | 0      |
| Social sciences, other .....                | 54     | 64     | 61     | 51     | 58     | 73     | 70     | 82     |
| Engineering, total .....                    | 1,685  | 1,912  | 1,939  | 2,243  | 2,351  | 2,434  | 2,590  | 2,628  |
| Aerospace engineering .....                 | 48     | 38     | 67     | 77     | 92     | 116    | 100    | 101    |
| Agricultural engineering .....              | 31     | 39     | 33     | 35     | 37     | 39     | 45     | 46     |
| Biomedical engineering .....                | 47     | 69     | 72     | 61     | 81     | 85     | 141    | 134    |
| Chemical engineering .....                  | 423    | 466    | 550    | 568    | 535    | 526    | 521    | 569    |
| Civil engineering .....                     | 203    | 182    | 168    | 185    | 187    | 181    | 210    | 200    |
| Electrical engineering .....                | 186    | 193    | 241    | 339    | 313    | 383    | 407    | 378    |
| Engineering science .....                   | 38     | 74     | 76     | 117    | 71     | 78     | 95     | 101    |
| Industrial eng./manufacturing eng. ....     | 32     | 32     | 6      | 27     | 38     | 63     | 53     | 29     |
| Mechanical engineering .....                | 216    | 302    | 220    | 324    | 349    | 355    | 383    | 402    |
| Metallurgical/materials eng. ....           | 325    | 323    | 363    | 392    | 450    | 403    | 441    | 490    |
| Nuclear engineering .....                   | 17     | 36     | 30     | 29     | 34     | 40     | 39     | 28     |
| Engineering, other .....                    | 119    | 158    | 113    | 89     | 164    | 165    | 155    | 150    |
| Total, health fields .....                  | 6,396  | 7,014  | 7,745  | 7,992  | 8,857  | 9,664  | 10,574 | 9,384  |
| Clinical fields .....                       | 4,905  | 5,505  | 6,184  | 6,366  | 7,072  | 7,629  | 8,348  | 7,085  |
| Dental sciences .....                       | 94     | 45     | 53     | 77     | 75     | 102    | 195    | 227    |
| Nursing .....                               | 30     | 36     | 23     | 28     | 28     | 40     | 48     | 43     |
| Pharmaceutical sciences .....               | 484    | 533    | 487    | 475    | 486    | 534    | 575    | 504    |
| Preventive medicine/community health .....  | 163    | 192    | 218    | 204    | 231    | 248    | 264    | 291    |
| Speech pathology/audiology .....            | 26     | 28     | 27     | 40     | 46     | 49     | 40     | 52     |
| Veterinary sciences .....                   | 132    | 111    | 102    | 119    | 117    | 133    | 138    | 159    |
| Other health fields .....                   | 562    | 564    | 651    | 683    | 802    | 929    | 966    | 1,023  |

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

**Table 39. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by field, source of support, and number of postdoctoral appointees who were non-U.S. citizens: 1995**

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| Field                                       | Total  | Source of support |             |               |             | Number of post-doctoral appointees who were non-U.S. citizens |        |
|---|--------|-------------------|-------------|---------------|-------------|---|--------|
|   |        | Federal           |             |               | Non-Federal |   |        |
|   |        | Total             | Fellowships | Trainee-ships |             |   |        |
| Total, all surveyed fields .....            | 35,379 | 24,330            | 3,136       | 2,721         | 18,473      | 11,049  | 17,377 |
| Total, science and engineering fields ..... | 25,995 | 18,884            | 1,929       | 1,315         | 15,640      | 7,111   | 13,217 |
| Sciences, total .....                       | 23,367 | 17,091            | 1,869       | 1,289         | 13,933      | 6,276   | 11,576 |
| Physical sciences .....                     | 5,768  | 4,593             | 311         | 73            | 4,209       | 1,175   | 3,223  |
| Astronomy .....                             | 263    | 233               | 32          | 0             | 201         | 30  | 86     |
| Chemistry .....                             | 3,581  | 2,764             | 206         | 68            | 2,490       | 817   | 2,106  |
| Physics .....                               | 1,821  | 1,514             | 66          | 5             | 1,443       | 307   | 983    |
| Physical sciences, n.e.c. .....             | 103    | 82                | 7           | 0             | 75          | 21  | 48     |
| Earth, atmospheric, & ocean sciences .....  | 841    | 687               | 41          | 5             | 641         | 154   | 341    |
| Atmospheric sciences .....                  | 88     | 83                | 0           | 0             | 83          | 5   | 34     |
| Geosciences .....                           | 434    | 353               | 13          | 1             | 339         | 81  | 200    |
| Oceanography .....                          | 258    | 215               | 26          | 3             | 186         | 43  | 84     |
| Earth, atmos., & ocean sci., n.e.c. .....   | 61     | 36                | 2           | 1             | 33          | 25  | 23     |
| Mathematical sciences .....                 | 255    | 168               | 35          | 5             | 128         | 87  | 144    |
| Computer sciences .....                     | 212    | 155               | 5           | 3             | 147         | 57  | 100    |
| Agricultural sciences .....                 | 690    | 408               | 15          | 1             | 392         | 282   | 307    |
| Biological sciences .....                   | 14,658 | 10,472            | 1,326       | 1,061         | 8,085       | 4,186   | 7,232  |
| Anatomy .....                               | 528    | 403               | 40          | 51            | 312         | 125   | 216    |
| Biochemistry .....                          | 2,410  | 1,893             | 202         | 119           | 1,572       | 517   | 1,247  |
| Biology .....                               | 1,601  | 1,201             | 191         | 41            | 969         | 400   | 750    |
| Biometry/epidemiology .....                 | 143    | 114               | 19          | 62            | 33          | 29  | 63     |
| Biophysics .....                            | 230    | 177               | 25          | 5             | 147         | 53  | 124    |
| Botany .....                                | 654    | 485               | 41          | 0             | 444         | 169   | 277    |
| Cell biology .....                          | 1,725  | 1,105             | 227         | 67            | 811         | 620   | 837    |
| Ecology .....                               | 96     | 65                | 7           | 0             | 58          | 31  | 30     |
| Entomology/parasitology .....               | 179    | 125               | 9           | 1             | 115         | 54  | 58     |
| Genetics .....                              | 731    | 452               | 70          | 53            | 329         | 279   | 349    |
| Microbio., immunology, & virology .....     | 1,952  | 1,432             | 145         | 190           | 1,097       | 520   | 1,010  |
| Nutrition .....                             | 186    | 108               | 6           | 14            | 88          | 78  | 103    |
| Pathology .....                             | 1,180  | 736               | 59          | 158           | 519         | 444   | 639    |
| Pharmacology .....                          | 1,408  | 1,079             | 151         | 155           | 773         | 329   | 719    |
| Physiology .....                            | 1,026  | 753               | 92          | 110           | 551         | 273   | 541    |
| Zoology .....                               | 164    | 102               | 16          | 10            | 76          | 62  | 62     |
| Biosciences, n.e.c. .....                   | 445    | 242               | 26          | 25            | 191         | 203   | 207    |
| Psychology .....                            | 572    | 419               | 82          | 114           | 223         | 153   | 115    |
| Social sciences .....                       | 371    | 189               | 54          | 27            | 108         | 182   | 114    |
| Agricultural economics .....                | 39     | 26                | 1           | 0             | 25          | 13  | 18     |
| Anthropology (cultural & social) .....      | 67     | 18                | 7           | 0             | 11          | 49  | 11     |
| Economics (except agricultural) .....       | 26     | 11                | 0           | 2             | 9           | 15  | 9      |
| Geography .....                             | 20     | 13                | 0           | 0             | 13          | 7   | 10     |
| Linguistics .....                           | 16     | 3                 | 0           | 1             | 2           | 13  | 5      |
| Political science .....                     | 36     | 6                 | 1           | 2             | 3           | 30  | 11     |
| Sociology .....                             | 85     | 67                | 20          | 17            | 30          | 18  | 19     |
| Sociology/anthropology .....                | 0      | 0                 | 0           | 0             | 0           | 0   | 0      |
| Social sciences, other .....                | 82     | 45                | 25          | 5             | 15          | 37  | 31     |
| Engineering, total .....                    | 2,628  | 1,793             | 60          | 26            | 1,707       | 835   | 1,641  |
| Aerospace engineering .....                 | 101    | 81                | 0           | 0             | 81          | 20  | 65     |
| Agricultural engineering .....              | 46     | 21                | 0           | 0             | 21          | 25  | 33     |
| Biomedical engineering .....                | 134    | 104               | 13          | 19            | 72          | 30  | 59     |
| Chemical engineering .....                  | 569    | 375               | 8           | 6             | 361         | 194   | 355    |
| Civil engineering .....                     | 200    | 113               | 4           | 0             | 109         | 87  | 125    |
| Electrical engineering .....                | 378    | 282               | 4           | 0             | 278         | 96  | 240    |
| Engineering science .....                   | 101    | 79                | 8           | 1             | 70          | 22  | 58     |
| Industrial eng./manufacturing eng. ....     | 29     | 11                | 0           | 0             | 11          | 18  | 10     |
| Mechanical engineering .....                | 402    | 293               | 11          | 0             | 282         | 109   | 267    |
| Metallurgical/materials eng. ....           | 490    | 306               | 9           | 0             | 297         | 184   | 328    |
| Nuclear engineering .....                   | 28     | 15                | 0           | 0             | 15          | 13  | 19     |
| Engineering, other .....                    | 150    | 113               | 3           | 0             | 110         | 37  | 82     |

See explanatory information, if any, and SOURCE at end of table.

**Table 39. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by field, source of support, and number of postdoctoral appointees who were non-U.S. citizens: 1995**  
**-Continued**

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| Field                                      | Total | Source of support |             |               |             | Number of post-doctoral appointees who were non-U.S. citizens |       |
|--|-------|-------------------|-------------|---------------|-------------|---|-------|
|  |       | Federal           |             |               | Non-Federal |   |       |
|  |       | Total             | Fellowships | Trainee-ships |             |   |       |
| Total, health fields .....                 | 9,384 | 5,446             | 1,207       | 1,406         | 2,833       | 3,938   | 4,160 |
| Clinical fields .....                      | 7,085 | 4,012             | 997         | 1,127         | 1,888       | 3,073   | 3,212 |
| Dental sciences .....                      | 227   | 104               | 15          | 55            | 34          | 123   | 60    |
| Nursing .....                              | 43    | 35                | 14          | 11            | 10          | 8   | 0     |
| Pharmaceutical sciences .....              | 504   | 328               | 25          | 9             | 294         | 176   | 299   |
| Preventive medicine/community health ..... | 291   | 225               | 48          | 52            | 125         | 66  | 84    |
| Speech pathology/audiology .....           | 52    | 44                | 7           | 11            | 26          | 8   | 14    |
| Veterinary sciences .....                  | 159   | 82                | 4           | 9             | 69          | 77  | 64    |
| Other health fields .....                  | 1,023 | 616               | 97          | 132           | 387         | 407   | 427   |

**NOTE:** For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

**KEY:** n.e.c. = Not elsewhere classified

**SOURCE:** National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering